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And beacons burn again

What is higher education for? A naive question perhaps but one nevertheless which each generation must try to answer in its own way. Why do we encourage half a million young people, and a growing number of the not-so-young, to study history or sociology or physics or medicine for three or more years at an annual public cost of perhaps £3 billion? If we do not try to supply an answer, however qualified or complicated, the development of higher education can have no proper direction.

Its intentions and so its goals will simply be defined by the powerful inertia/momentum of the system of universities, polytechnics, colleges, research councils and the rest which we have inherited. They will be assimilated into the inevitably introverted ambition to maintain the status quo. Present ends will be derived from past means. Rival interpretations of the goals of higher education will simply be a projection of the equally powerful prejudice and occasional philistinism that are the product of the irritation provoked by the complacent ambition of this self-interested status quo.

Today, sadly, this is the quality of debate (non-debate?) about the intentions of higher education. The defenders of the system root their arguments in a glowing analysis of the damage that is being caused by the centralisation of power and the restriction of resources which they take to be typical of the present Government's policies towards higher education. Of course in making their defence they allude to both altruistic and utilitarian arguments derived from particular views of the ultimate purposes of higher education. But such arguments are deployed in rhetorical or illustrative support not in the front line.

The same reticence is apparent among the critics of higher education. They argue that the system must be made more cost-effective, that its quality must be improved, and that it must become more selective. They are reluctant to question the goals of higher education, which in their view seem to be unquestioned, but confine their concern to how these goals can be achieved more effectively. Of course occasionally their criticism of means spills over into doubt about ends, most notably in their views of social science and the humanities. But as with the defenders of higher education, their ultimate intentions are a sideshow. This is the territory in which Scruton's skirmishes fight; it is not the main battlefield.

A generation ago the Robbins committee placed their discussion of the aims and principles of higher education in the first place in their famous report. These aims they reduced to four - instruction in skills suitable to play a part in the general division of labour, the promotion of the general powers of the mind, the advancement of learning, and the transmission of a common culture. The difficulty almost a quarter of a century later is not that we object to these four aims but that they seem to be too general. For both the potency and the practicality of the Robbins definition of the aims of higher education were derived from that envelope of surrounding assumptions, the postwar consensus in politics which was still strong in the early 1960s, the rise of an affluent consumer society, the cultural liberation of that decade.

Today that envelope has been torn up and thrown away. We are left only with Robbins's phrases, their eloquence very much diminished. By themselves these words mean little in the changed (for the worse) circumstances of the 1980s. Their growing insufficiency has been felt by many. In the months leading up to the publication of last summer's Green Paper ministers were fond of saying that the present was a moment like Robbins. The more hopeful among us interpreted this remark as meaning that ministers recognized the pressing need to rewrite Robbins, to modify or reaffirm its statement about aims and principles in

the language of the 1980s. The National Advisory Body, and later the University Grants Committee, both recognized that need. In their respective documents offering advice to Sir Keith Joseph, the Secretary of State for Education and Science, the NAB and the UGC drafted a common chapter on "Higher Education and the needs of society". This was a deliberate and direct attempt to update the Robbins definition on which the system still leaned. It is no criticism of their joint effort to say that even this bold attempt to go back to first principles was not completely successful. The new NAB/UGC principle, which emphasizes an engaged "ability to benefit" rather than simply descriptive qualifications, is very fine. But even it must be built into a bedrock of aims that are unexamined in the common chapter. Instead the four Robbins aims are merely repeated and a fifth, the provision of continuing education, added with excellent symbolism but indifferent logic.

Nor is it a criticism of the UGC's and the NAB's joint effort to remark on the priority reflected in the title of their chapter. After all an even more cramped reference point, that of the economy, could have been chosen. Maybe this emphasis on the needs of society, which appears today quite unremarkable, is a silent measure of how far we have advanced down the road to collectivist values. The Robbins report was written in a world of simple individualism, a world in which cultural tradition and social engineering were seen as serving individual goals, a world that is lost.

The Green Paper of course made no attempt to rewrite Robbins. It provided not even the flicker of that wider vision of what higher education's goals should be in a liberal democracy with a

'So far no one has succeeded in re-writing Robbins to match the spirit of our age - affluent but anxious, dynamic but divisive'

altering economy in the last years of the 20th century. Maybe the widespread revulsion to the Green Paper can be explained in part by a general disappointment that the Department of Education and Science failed to establish those clear first principles around which its policies could cohere. In the 1960s the Robbins committee succeeded in rewriting the first principles it had inherited from a quieter academic age to reflect the power of science which had been revealed irresistibly during the war and the new social democracy that was the keynote of postwar society. So far in the 1980s not one, least of all the DES, has succeeded in rewriting Robbins's first principles to match the spirit of our age, affluent but anxious, dynamic but divisive. This failure is at the root of the incoherence of higher education policy.

So maybe after all apparently naive questions like what is higher education for need to be asked. For out of the answers are fashioned higher education's sense of its place in the sum of the present. The past offers three possible answers. The first is derived from utilitarianism. Higher education adds to the value of the economy, of the community and of the individual. The acquiring of knowledge is the means to gaining wealth, power and status. This is the answer on which most Governments in most countries in most periods of history have relied to justify higher education and which has fuelled the popular appetite for it.

Yet it quickly encounters objections. The necessary demarcation between the useful and the useless becomes more and more treacherous with the rapid and unpredictable advance of technology. Despite urgent skill shortages there is a growing mismatch between the subjects students study and the careers they follow as graduates. Many do not "use" the knowledge they have acquired; rather they employ what have been called

transferable intellectual skills and exploit the status that a higher education still bestows.

This phenomenon of course raises the old arguments about human capital. Do advanced societies possess sophisticated systems of higher education because they need them or because they can afford them? But in general such objections are ignored. The Conservative Government of the 1980s believes as strongly as the Labour Government of the 1960s that higher education's predominant obligation is to serve the nation, first and foremost in its material aspect.

The second answer is that higher education's main job is to uphold, transmit and if possible raise the standards of culture. Many associated views shelter under this cultural umbrella. For some higher education should lead to higher standards of conduct - in an intellectual sense by fostering rationality, in a personal sense by getting students to take a more moral view of their lives, and in a public sense by promoting the values of the gentlemanly (the language is hopelessly out of date but the idea is very much alive). For others higher education should introduce its students to a common (=high?) culture. In the days of Jowett the aim was to produce cultivated members of the political, administrative and professional elite who would enjoy the quiet solidity of shared values; today in our age of democracy and mass culture the focus may be fuzzier but the intention has changed little.

In this second case the gaining of knowledge is more than simply the essential means by which desirable external goals can be achieved, as in the case of the utilitarian version of higher education's aims. Clearly knowledge is an integral part of any culture. Even so there are difficulties. Precisely because our culture is defined in terms of particular knowledge, it ignores and discriminates against other kinds of knowledge; this is where both C. P. Snow's "two cultures" and complaints about higher education's anti-industry ethos come into the argument. Even so, this version of higher education encourages a celebratory rather than a scientific approach to that knowledge which is regarded as central to cultural tradition.

The third answer is very unfashionable today. It is a notion characterised usually with a silent sneer, as knowledge for knowledge's sake. The slightest breath of sympathy for this view invites ridicule or suspicion. Yet curiosity in its simplest form is probably the most significant motive in any search for knowledge, from the nursery school room to the Nobel prize winner's laboratory. It is perhaps as powerful a force as any thought of utilitarian added-value or ambition for cultural advantage. It is the restlessness that changes the world.

Maybe it does more. The poet and scholar A. E. Housman made this grander but simpler claim in a lecture at University College London in 1892: Let a man acquire knowledge not for this or that external and incidental good which may chance to result from it, but for its own sake, because it is knowledge and therefore good for men to acquire. For knowledge resembles virtue in this, and differs in this from other possessions, that it is not merely a means for procuring good, but is good in itself: it is not a coin which we pay down to purchase happiness, but has happiness indissolubly bound up with it.

W. H. Auden of course dismissed his fellow poet as having deliberately chosen the "dry-as-dust". Maybe in the mouth of the editor of Manilius such views can be stigmatised as an apology for pedantry - but in the mouth of the author of *A Shropshire Lad* Housman's defence of knowledge as a good in its own right, in both a material and moral sense, rather than as the means by which other goods can be acquired cannot be dismissed lightly by those who seek to define and refine the aims of higher education, even in the utilitarian 1980s.

Laurie Taylor



Could you hang on for a moment, Professor Lapping, your phone is going... Yes, you have an idea for a book? I'm sorry, I didn't quite hear your name. Swinerton what? And the proposed working title? Come again? ... Ah, "Some Random and Almost Completely Unfounded Thoughts on Science". A little on the length perhaps. Would you have any objection to shortening it? Good. Then about "Random and Unfounded Thoughts: 'Social Science'". I could work it up into a series. Excellent. Excellent. Double spacing, margin. Excellent. Look forward to seeing your manuscript. Bye...

Now, Professor Lapping, were we? Ah yes. First of all, that you for getting the book in the We've all been a bit pushed here but our messenger boy had a glass through it last Thursday and it was "quite good", so the book is green for go. One slight problem though, Title. Yes, we all liked your suggestion of "New Directions in Cultural Studies", but I'm afraid our old computer tells us that it's already been used by a book which we have that title due out next month. And, unfortunately, your own choice, "New Developments", was for less than a year in the Macmillan series, and it's already been used by a book which we have that title due out next month. And, unfortunately, your own choice, "New Developments", was for less than a year in the Macmillan series, and it's already been used by a book which we have that title due out next month.

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They will look at the amount of time spent by the main committee on "special pleading" cases made by individual universities, to see if these could be dealt with by officials or subcommittees. Numbers of these cases have risen enormously since 1981.

They will also look at the role and impact of lay people on the UGC and comment on the size of the committee. Graham has discussed the possibility of a two-tier system, with a small, predominantly lay committee alongside a bigger committee reflecting a wider range of distinguished scholars.

Submissions to the Graham Inquiry so far have said overwhelmingly that the secretariat must be strengthened, with more staff and more secondments from outside.

The Inquiry has also discussed the idea of giving the UGC chartered status, as a means of increasing its independence, but the Committee of Vice-Chancellors and Principals has argued strongly against this line.

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Consultants probe UGC

by Ngalo Crequer

The Graham Inquiry, which is reviewing the role and functions of the University Grants Committee, is to hire a firm of management consultants to examine how the UGC makes decisions.

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OU plans huge increase in student numbers

by Maggie Richards

The Open University is to present radical new plans to the Department of Education and Science allowing for a massive surge in student numbers.

The plans envisage an increase of almost 50 per cent in undergraduate students, taking levels from the current 67,000 on degree courses to a possible 100,000.

The plans are being prepared for internal OU committees, but it is intended that final papers should be ready for the university's visiting committee, the intermediary body which negotiates with the DES, by this summer.

In the short term, the university wants the DES to permit gradual growth up to the end of the decade, with undergraduate levels rising to 70,000 by 1990. This will involve raising the university's undergraduate intake from 20,000 admissions each year to 22,000 per year from 1988 up until 1990.

The university claims the cost of such an increase would be marginal as additional students could be assimilated without seeking extra cash. It is an economic argument which the OU used successfully in its campaign several years ago to fend off cutbacks in student numbers proposed by the DES. Then the university argued reductions in student numbers would merely mean the underutilization of existing resources.

The long-term financial implications of boosting student numbers to 100,000 will be immense, the university admits, but so far it has been keen about revealing any costs.

In presenting its short-term plans, the OU has been mindful that last year's applications for undergraduate courses broke all previous records; 56,000 people requested places, which in turn led to the highest number of rejections recorded - more than 24,000. The university is anxious to

avoid long and disheartening delays for prospective students, some of whom are now having to wait two years for a place.

In looking to the long-term future, the university will be presenting statistics to the DES, demonstrating that white numbers of 15 to 29-year-olds in the population will decline by 2.9 million in the next 10 years, those in the 30 to 59 age group - a prime recruiting area for the OU - will leap by 3.1 million.

Throughout the 1990s, the OU would like to see its student numbers increasing to reach an optimum 100,000 undergraduates by the year 2000. It also anticipates steady growth in its continuing education programme alongside expansion in degree course work.

But the university is having to consider the many ramifications of such a plan. One immediate problem might be maintaining the present delicate balance between the highly popular arts courses and less well supported science and technology programmes.

Any positive discrimination or incentive to study science and technology might disturb the equally fine balance of male and female students. One remedy is a proposal to launch science and technology courses specifically aimed at women.

In attempting to accommodate such a massive increase in students the university might also find its carefully nurtured regional intakes affected. Demand for maths, science and technology courses is already greater in some areas than in others, and a method of making courses more appealing in undersubscribed regions might need to be devised.

The OU is adamant, however, that fee increases should not be used as a means of financing any expansion. Many students, it argues, are already stretched to the limit and could not afford increased fees.

Britain tops transatlantic brain drain

by Jon Turney
Science Correspondent

Britain contributes more scientists and engineers to the transatlantic brain drain than all other European countries put together. But the outflow from Britain to the United States is not increasing, as many UK scientists believe.

Figures from the United States immigration service analysed by the US National Science Foundation show that the United Kingdom contributed 9 per cent of the inflow of 9,500 foreign-born scientists taking up permanent residence in the US in 1984.

More than 1500 of the total were born in the countries of Western Europe, and 659 of these came from the UK. The vast bulk of the immigrants were engineers, but 114 of the British were natural scientists, and 105 were mathematicians or computer scientists.

This contribution puts the UK far ahead of any other European country. The republic of Ireland is the only other Western European nation losing more than 100 scientists and engineers to the US in the same year's figures.

However, the figures show that countries elsewhere in the world also contribute significantly to the American supply of qualified people. In 1984, the US clocked up over 700 scientific and engineering immigrants from Iran and the Philippines, more than 800 from Taiwan, and more than 1,000 from India.

Nevertheless, the US data underlines the widespread belief that declining British scientists are leaving for the US in ever larger numbers. An ABCR study indicating serious loss of good researchers overseas helped the board secure a £15 million increase in the research councils' allocation for 1986/87.

The most popular destination for expatriate Britons is California, followed by New York state and Texas. Immigrant scientists and engineers: 1982-84. National Science Foundation, Washington, D C

by John O'Leary

Planned cuts in polytechnic and college enrolments will be halved as a result of this week's advice from Sir Keith Joseph, Secretary of State for Education and Science, to the National Advisory Body to expect an extra £23 million in its budget for 1987/88.

Without guaranteeing more money than the £270 million indicated in last month's Expenditure White Paper, Sir Keith suggested that the NAB should produce two parallel plans, one of which would assume a 3.5 per cent increase in this figure. The other would continue existing planning for no additional money to be made available.

The board of the NAB agreed to recommend that officers' proposals for 1987/88, due to go out on April 4, should assume that the extra £23 million is provided. The NAB committee is likely to accept this when it meets later this month to finalise details of the planning exercise.

The result would be cuts in first-year enrolments of fewer than 10,000, compared with a reduction of at least 18,000 if the White Paper budget was confirmed. NAB officials calculate that there would still be a shortfall of £23 million on the amount needed to satisfy student demand without cutting funding levels further.

The DES hopes to persuade the NAB to take still more students. But a joint meeting of the board and the committee last week stood by the commitment to maintain funding levels.

Mr John Bevan, the NAB secretary, said that the lower level of cuts could be achieved without college closures, but some were still likely. Some closures may be inevitable in any case, as a result of the rationalization of teacher training being carried out by the Department of Education and Science.

The NAB secretariat will draw up two alternative plans, one for the full 6 per cent cut and one for level funding. Neither will be sent out unless one turns out to be more accurate than the new assumption of a 3 per cent.

The board has also recommended a three-tier approach to differentiating between subjects. None of the 19 programme areas used by the NAB would be fully protected from cuts, although the body has no control over teacher training numbers. Four programmes (art, humanities, performing arts and social and administrative studies) would take the heaviest cuts, more than 16 per cent; three (environmental sciences, languages and professional and vocational studies) would be in a middle group, cut by 11 per cent; while the other 10 programmes would take cuts of less than 6 per cent.

Mr Christopher Ball, chairman of the NAB board, said: "I welcome the Government's decision but I doubt whether they have yet gone far enough to meet the real needs of education, in particular to provide the skilled manpower which industry needs."

Sir Keith's advice came in a letter to Mr George Walden, his under-secretary. In his capacity as chairman of the NAB committee. In it, he said he was disturbed by the "single pessimistic assumption" on which the NAB was planning provision for 1987/88. It would be inappropriate to put undue weight on the White Paper figures, he said, since local authority spending was still to be determined.

He added that it was impossible to predict how much money would be given to local government or what share would go to education. But NAB members believe that it would be difficult for him to go back on the new budget, having encouraged them publicly to plan for a particular level of funding.



Bob Spain shows off his working reproduction of a Roman watermill, built at Mid-Kent College. Mr Spain, a chartered engineer doing a PhD at Imperial College, now spends his evenings pouring wheat into the mill to assess the speed and method of production, as well as the quality of the product, in an investigation of Roman technology.

Tory MPs try to enforce free speech

by David Jobbins

Conservative MPs, angered by the vice chancellors' failure to take a tougher line against students who disrupt meetings, are to back a Commons attempt to make free speech on campus enforceable in law.

They are to support a private member's Bill which the Conservative MP for Wytham, Mr Fred Sylvester, will try to introduce next Tuesday. He said: "It is an attempt to clarify the law so that the standards of disorder, mainly at political meetings, particularly in student unions, can be prevented in future."

The vice chancellors' guidelines acknowledge the importance of free speech but contain a number of holes.

In particular they oppose the prospect of universities simply forbidding meetings if disruption is feared. "In a student union it is very easy to raise the temperature and threaten disruption. This is a huge loophole."

The guidelines issued by Committee of the Vice Chancellors and Principals in the autumn in response to repeated warnings from Sir Keith Joseph, Secretary of State for Education and Science, pinpointed the legal difficulties connected with meetings on union premises and identifying culprits.

"The Bill seeks to meet all these points and ensure that universities do not opt out of the best intentions of the vice chancellors," said Mr Sylvester.

speech on other premises including union accommodation. It would be up to universities to satisfy a court that reasonable steps had been taken to safeguard free speech.

And it specifies the considerations a court should bear in mind when deciding whether a university had acted reasonably. These include whether it has had a bad record with dealing with past disorders, previously failed to fine unions or not made proper arrangements with the police.

Many MPs are said to be concerned that the vice chancellors have failed to take sufficiently tough action to curb abuses and the advice that meetings should be banned if it is feared there may be trouble has already drawn veiled criticism from Sir Keith.

DON'S DIARY

SUNDAY

Rise earlier than I had hoped, and turn on the word processor. The centre has two visiting lectures by travelling Canadians within the next month, and audiences must be found. The History Graduates Association will include details in their next mailing, but they need them quickly.

While Ann, my wife, is not looking, I sneak over to the centre, print the files and get them ready for photocopying. Jean, my secretary, will come in tomorrow and marvel at my diligence.

The afternoon is spent sifting student application forms. A Canadian company has funded a three-week transatlantic study tour during the Easter vacation, and the Alberta government has added support which enables us to go to western Canada. The problem is that we can only take 10, and far more wish to go.

MONDAY

A German student walks into the office. He has seen a notice about the *Experience Canada* study tour, is very interested and wonders if there is place for me. I explain that it is limited to students in our courses, but he does not want to take them for an answer. I try to telephone a senior colleague: an American student has objected to my essay mark, and I am trying to arrange an authoritative second opinion. A third year student drops by on a pretext, and casually asks who are "the guys" who will interview him tomorrow. His jaw drops when I reply that two of the guys are women.

I head for lunch with one of them, Jan, from the university administration. We go over the applications again. The task is interesting, and I am late for my 2pm lecture, but am successfully manage to disguise my entire lack of interest in Sir Wilfrid Laurier. The American student remains behind to make a formal request to have his essay re-marked.

TUESDAY

My senior colleague rings to say he will re-mark the American's essay, which I despise. Lecture at 10am to the first year class, counting my blessings that Stephen will take the tutorials this week. Ann calls in bearing supplies for a bread-and-cheese lunch to accompany a lunchtime slide presentation: it is a pleasant gimmick to attract people into the place, and is one of the few skills I learnt as an undergraduate which are still useful to me. Ring the travel agent to start booking train tickets to ride through the Rockies from Calgary to Vancouver. Bernice from Alberta House in London arrives to act as external assessor in the interviews.

The interviews begin, with students arriving in unfamiliar sports jackets or skirts and pearls. Many have little idea how best to present themselves, and we gently probe the famous Scots reticence. One young woman is extremely shy. When asked if she has anything special to tell us, she pauses and says that she really wants to go, because her friend was on the tour last year and came back a different person.

WEDNESDAY

I have slept badly, and keep thinking of that shy girl. Hunt for a file on a seminar next month, a deadline which contributed to my insomnia. Post off tapes of our radio programme which is broadcast by campus stations across Canada: universities are harmless theatres for role-playing, and I am in the grip of a Terry Wogan fantasy. Bernice arrives, having sacked the boutiques of Edinburgh, and we head for the library, where the ever-excellent Murray shows us the Canadian collections.

Make a mental note that it would be nice to use them myself. Interviews continue all afternoon. At 4pm the three of us begin to make permutations for this must be a balanced party. In remarkably quick time, we have an agreed list.

THURSDAY

Where did Thursday go? Lecture at 10am, and praise all the applicants for their interview performance as a way of indicating that while many were called, few can be chosen. Afterwards, I run into that shy girl who tries to be a little away, but we chat about the interview. She explains that there are boy-friend problems which made her interview badly. Would have loved to tell her she was chosen, but am too cowardly to break the news to any of them. She scuttles off, no doubt in the depths of dejection.

Jean has prepared standard letters offering either places on the tour or commiserations at being left behind, and she spends the day typing in the addresses. I sign batches, adding the odd personal postscript. Lunch with Sandy, co-ordinator of the centre committee and one of the busiest men in the university. We rush through as much business as we can over a snack.

On the way back, I spot a book-sale, and fall for temptation. My senior colleague returns the American's essay and suggests raising it by two marks: hope this will end the matter.

FRIDAY

Lecture at 10am. Today is an essay deadline for the first year class. There are the usual horrors. One lad has badly burnt his writing hand on a steam iron. Others are in panic because they cannot locate a vital book in the library collection. A director of studies rings about one of her students. She also knows the shy lass who so much wants to go to Canada. Learn that she has received the offer and is recovering miraculously from the boy-friend trouble.

Arrange lunch next week with a Canadian postgraduate, but today I eat at my desk, having replied to an urgent inquiry from the principal's office about library funding. At 1.55pm I remember that the honours class are coming in, and hastily prepare some notes on Canada and First World War. As I launch into this, they remind me that today was to be a tutorial, but my protest that I had spent five whole minutes writing the lecture carries the day. At 3pm I rush off to the faculty library committee, and advise a colleague's deft handling of yet another meeting to decide whether to order new periodicals. One department pleads that a new journal is crucial, but they omit to give the price. A sharp-eyed colleague thumps through the hastily copy and reveals that it is over £2000 a year. We defer it.

At 3.57pm I look nervously at my watch and bow out of the room: I don't actually have an appointment, but the agenda is a long one and this is my best chance to escape. I order a book in the library, and return ready to cope with the flood of dead grandmothers which invariably coincides with essay deadlines. At 5pm an honours student calls, a week late, to collect her first essay. It is good, but I have filled the margins with cartoon apostrophes, glaring and weeping at their persistent omission. She expresses surprise on learning that there are only two Es in "separate", and tells me she wants a career in journalism.

SATURDAY

Well, I did start various jobs, but we have bought a 30-channel portable television, having decided that renting is a waste of money. It has a special tuning device, which turns out to have been invented by the Special Operations Unit of Anti-Martin Headquarters. I have a full and frank exchange of views with the new set, which comes to heel after I offer to throw it out of the window. Take the rest of the day off.

Ged Martin

The author is director of the Centre of Canadian Studies at the University of Edinburgh.

Letters to the editor
A time and place for history

Sir, - The House of Lords meeting on the state of history in universities did little service to the defence of the discipline. By focussing on the need for "elitist" history, by criticizing social, economic, women's and third world history and by denigrating links with the social sciences, Lords Bullock and Elton denied much that is of greatest relevance and interest in the subject today.

These newer areas of historical inquiry are being developed, and in many cases pioneered, in the polytechnics. And yet this sector of higher education gets little attention in the defence of history campaign.

The increasing number of students taking some form of history in polytechnics is not always revealed in overall statistics. There are relatively few single honours history degrees. Most provision for history is in combined honours degrees in humanities or social science, where courses can offer the opportunity for specialization in history or joint honours. At Bristol Polytechnic, for example, students may specialize in history in the BA humanities. In the BA social science history can be combined with economics, sociology or politics.

Because history invariably partners other disciplines, courses have been orientated towards objectives and concerns that are not conceived purely in terms of the preoccupations of historians, although founded on their scholarship and research. This has meant, for instance, that historians have had to explore the borders between their own

discipline and others. There is a strong but not exclusive emphasis on recent history.

The same applies to relationships between the "varieties" of history. The usual pattern is that historians of all kinds and periods form an organized group, developing the curriculum together, and often devising courses that are taught in common. Thus at Bristol Polytechnic the first year course, which deals with British industrial society to 1914, is team taught by a group containing economic, social and political historians. The benefits of this cooperation are obvious with respect to research. At Bristol Polytechnic, for example, a group of social and economic historians is exploring the theme of labour and the firm in Britain since 1850.

The experience of Council of National Academic Awards' validation has encouraged a great deal of thinking about curriculum design. Historians have often had to face challenges about the value of their discipline in the non-university context. There is little doubt that they have in the main responded in an imaginative way and in so doing have made a distinctive contribution to the role of the discipline in higher education.

Yours sincerely,
DR GEOFFREY CHANNON,
DR JUNE HANNAM,
Department of Humanities,
Bristol Polytechnic.

Sir, - Justifications of academic disci-

plines contain a paradoxical mixture of specific and universalistic claims: the case of history such as the social sciences, need be taught in all other subjects, need be taught in all other university.

Defences of subjects become pleading unless given some general context. Your editorial of January begins to indicate some of the reasons.

One problem is the relationship between school and university conventions that exist to one knowledge. It is not clear that should be the same in the two institutions. A rigid correspondence might well destroy that interest in the past which is the first prize of historians. It has certainly destroyed the historian's contributions to the considerations of public life, which as you rightly state, the historians engage themselves seriously with. This is the failure of historians to engage themselves seriously with the problems of political education. Glancing references to training, citizenship are not enough, even as made by Professor Reid.

It is the refusal of the proposition the majority paradigm in history, structure history with the explicit aim of politics, economics and so on which has contributed to the decline of any sense of public life that we are witnessing today.

Yours faithfully,
GARETH BEAVEN,
Former chairman Politics Association,
7 Queensway,
Alstager, Stoke-on-Trent.

Research risk

Sir, - Peter Aspdren (*THE*, January 10), summarised the responses of the vice chancellors to the University Grants Committee letter. Each university listed what it considered to be its strengths, and some highlighted selected areas of research for priority funding.

Sometimes, the criterion used for the choice of areas of research was how much funding had been attracted from industry and the research councils for that particular project. The reason for the adoption of this criterion is presumably that it is extremely difficult to compare the quality of academic research in different disciplines.

This approach to the selection of university research areas, those which have apparently already been successful in raising funds, will risk the resources for other research including the following: research spending; innovative research; fundamental research; research in most arts subjects; research in individual or small departments; research results might be unpopular or controversial.

All these have been traditions regarded as proper types of investigation and the adoption of a public selectivity is likely to put them at risk. In addition, it comes perilously close to threatening the academic freedom of those engaged in these categories.

The council of the Association of University Teachers' meeting at castle on December 19-21 considered this policy. I would like to draw attention to the profession to its potential and long-term danger: change in academic direction.

Yours faithfully,
RICHARD WELLS,
Director of Public Affairs,
New Scotland Yard.

Yours faithfully,
HAROLD HILLMAN,
Association of University Teachers,
Surrey University.

Crowd control

Sir, - I was interested to read the article "a multitude of questions" (*THE*, January 3), for the conference on crowd behaviour dealt with matters of current concern. However, I was disturbed at the way in which police participation in the conference was misrepresented.

The commissioner did not attend because he cannot accept all of the invitations made to him. He undertakes a strenuous programme of public events and must deal with a vast number of other requests for delegation. At the conference, he was ably represented by senior and experienced members of the force, both from the field of operations, as well as from research and training.

More than a fifth of the conference

participants were serving police officers or of the academic staff of the Police Staff College, Bramshill. The presence of both teaching staff and practitioners ensures that any lessons to be learnt are assimilated for their theoretical and practical content. The representation of the Police College ensures that the material is available for a national police audience.

The comments made by Karen Gold in the article do nothing to help the process of addressing problems in concert with other interested organizations - a concept to which we are fully committed.

Yours faithfully,
RICHARD WELLS,
Director of Public Affairs,
New Scotland Yard.

Student support

Sir, - The figures on student support in different countries quoted by Sir Keith Joseph and reproduced in the item by David Jobbins (*THE*, January 24) are misleading in that they ignore the variations in indirect subsidy to students. Those subsidies, on such things as food and accommodation, are now virtually non-existent in the UK whereas in France, for example, they cut the cost of studying considerably. We should spare a thought too for the increasing numbers of students here who pay their own tuition fees, which, though subsidized, are higher than in most of the countries listed.

Yours faithfully,
RUPERT BRISTOW,
South Bank Polytechnic.

Social science

Sir, - We are asked once again, this time by the chairman of the University Grants Committee no less, to consider whether there is such a thing as social science (*THE*, January 17). Well, science is the Government wished to know whether its policy for dealing with young offenders by administering "short, sharp shocks" were effective. Researchers would identify the target group of delinquents, randomly allocate half to detention centres and the other half, perhaps, to probation officers for short periods of supervision; then after a suitable period following release, we could see whether group A or group B committed more or less offences.

Such an approach would be unlikely

to be adopted by a philosopher or modern historian, for were we to attempt to improve upon it, we could only explore with the subjects, how they respond to violence or law, and factors in their recent history which might have led them to such views.

Wouldn't this, with the accompanying statistics be social science, pure and simple? And wouldn't it be a suitable question for Sir Peter Shore to ask: Dyer he is there such a thing as political objectivity in higher education policy?

Yours faithfully,
BRIAN SHILDON,
Royal Holloway College.

Choice of places
'more realistic'

by Peter Aspdren

Applicants for university places are making a more realistic assessment of their subject choices, and taking greater account of their future job prospects, claims the annual report of the Universities Central Council on Admissions.

The new mood of realism helps to explain the decline in applications to study medicine at universities, which shows a fall of 7 per cent between 1983 and 1985. "Perhaps candidates for medicine have a more realistic view of their chances of obtaining a place," says the report, published yesterday. Accounting has shown consistent growth over the same period, while business management has risen even more sharply, reflecting candidates' perception of their chances of obtaining employment with degrees in these subjects. The most popular subject is now law, which has shown an increase of 17 per cent in the last two years.

In engineering and science, figures reveal that candidates are opting for combined courses rather than for single subjects, with the sole exception of electrical engineering. Demand for computer science has levelled off after a period of growth.

Economics, English, geography and history have remained largely stable.

but demand for single honours language courses has fallen.

The UCCA report shows that the total number of applicants rose from 173,674 in 1984 to 176,553 in 1985 - a rise of 1.7 per cent. Home candidates increased from 156,488 to 157,085, with the rise in women candidates more than offsetting the decline in men.

But comparisons with 1984 are misleading, because of the addition of Strathclyde and Glasgow universities to the UCCA scheme, and the establishment of Ulster University, says the report. These changes have masked what would have been a small drop in the number of home candidates. By contrast, overseas applicants have risen by 13.3 per cent, from 17,186 to 19,468, thanks to the efforts of universities and the British Council, and the lower real cost of fees.

The number of home candidates accepted by universities rose by 6.1 per cent from 71,768 to 76,181, while overseas acceptances increased by 18.5 per cent, from 5,663 to 6,708. Universities in England and Wales accepted approximately the same number of candidates as last year, while more candidates were accepted by Scottish universities, even allowing for the addition of Strathclyde and Glasgow.

Polys drop out for lack of Commonwealth cash

by John O'Leary

Only two polytechnics have joined the Overseas Development Administration's new scholarship scheme for Commonwealth students, although the number of places available will be three times the original number.

Some of the £6.4 million saved through Britain's withdrawal from Unesco will be used to increase the number of places offered under the ODASS scheme to 150 per year. The total had been raised previously from 50 to 100 because of the demand from universities.

Some 30 universities bid for places in the scheme, which demands that they should raise half the students' costs in order to receive matching funding from the ODA. The institution's share must come from private funds.

Despite initial enthusiasm from a number of polytechnic directors, only Kingston and South Bank bid for places. The polytechnics and colleges

do not have access to the kind of trust funds used by many universities and Oxbridge colleges to fund places, and they have found it difficult to raise money from industry and commerce.

Few universities have taken more than one or two places. Strathclyde, Liverpool and the Cranfield Institute of Technology have been given the largest allocation, with five places each.

The first students will arrive in September, having been selected in their home countries on grounds of academic excellence. Only those from developing Commonwealth countries are eligible.

Two other scholarship schemes will also be launched with money taken from the Unesco membership savings. Both are still being formulated and will not offer places until 1987. One will enter for black South Africans, while the other will be open to Chinese students and the costs shared with the Chinese government.

Di-ed in the wool traditionalists

The Prince and Princess of Wales have not won many votes of confidence from the student body.

According to Manchester University students' newspaper, students think Princess Diana is not bright enough to merit becoming their next chancellor.

And students at the Gaelic College on Skye are opposing an invitation to Prince Charles to become the college's patron, on the grounds that he represents a traditionally anti-Gaelic establishment.



Cardiff books investigated

A firm of accountants has been called in by the Department of Education and Science to investigate the financial position of University College, Cardiff.

Price Waterhouse have been asked to verify whether the college's estimates of how it will clear its £3.5 million accumulated debt are accurate.

Dr Cecil Bevan, the principal, said the accountants would be looking at specific matters relating to the college's financial position. He added

they had originally been asked also to look at aspects of the college's management but that this request had been withdrawn.

He said the DES had called in the auditors "after certain alarmist noises had been made". The investigation would be short and the college had not changed its view that the college would be secure by 1987.

UCC is to merge with the University of Wales Institute of Science and Technology by the end of the decade.

There is confusion over a decision by the Department of Health and Social Security to class students in Stirling University residences as private tenants, cutting their supplementary benefits.

Labour's Scottish education spokesman, MP Harry Ewing, has strongly advised the students to fight a test case.

Stirling runs a two-semester year, with a seven-week Christmas vacation which ends this weekend. Ms Val Hendry, president of the students association, said students had discovered during the vacation that they were receiving only £2 supplementary benefit instead of the £29.50 they were expecting.

A DHSS official confirmed that students were now being treated as private tenants, following the Government's new board and lodgings regulations, on the advice of the department's chief adjudication officer. The

MSC told to take planning role

by Patricia Santinelli

The Government has told the Manpower Services Commission it should take a leading role in planning higher education's contribution to manpower supply.

The instruction is contained in a letter from Lord Young, the employment minister, to Mr Bryan Nicholson, MSC chairman and spells out a much broader and fundamental role in education and training arrangements for the commission.

The letter, which has been agreed with the Secretary of State for Education, says one of the commission's priorities over the next three years should be to establish closer links with the National Advisory Body and the University Grants Committee on planning the contribution of higher education to the supply of highly qualified manpower.

Lord Young adds that such an initiative is timely because unemployment is still too high and there are exceptionally rapid changes in the distribution and nature of jobs.

This presents a major challenge to the commission to use its influence and resources to assist in modernising and developing a training and vocational education system which will provide rapidly and flexibly the skills that employers and individuals will need", the letter says.

Lord Young envisages the MSC's influence and resources being used in developing new vocational qualifications, in making a more effective contribution to curriculum changes at all levels from the Youth Training

Scheme to adult training, via non-advanced further education, as well as improving arrangements for further education staff development.

In addition Lord Young says he would like to see the approach to quality and approval of training organizations developed by the commission for the two-year YTS not only firmly established but applied to other training and vocational education for which the MSC has financial and planning responsibility.

He adds that the overall strategy is intended to apply to Great Britain, and that it will have to be approached from a different angle in Scotland so as to reflect institutional differences, and the introduction and continuing development of the new National Certificate courses.



Stopping freshers wasting time of their lives

Civil engineering student Michael Agnew is reaping the benefits of Heriot-Watt University's innovative course which helps first-year students learn how to learn.

Michael and Professor John Cowan, Heriot-Watt professor of engineering education, are to attend a conference beginning next weekend at the University of South Carolina

on "The Freshman Year Experience".

South Carolina has itself won a presidential citation for pioneering a course which has been successful in reducing failure rates among first-year students. It differs, however, from the Heriot-Watt programme in that it is separate from other subjects, and gives students advice on using the library, and planning how to use

their time. The Heriot-Watt course is integrated with other first-year subjects, and aims to help students work out their own answers to problems of learning.

The scheme was developed following research in the 1970s which showed that traditional university courses often encouraged a superficial approach to studying a subject.

Specialist training defended

The controversial requirement that trainee primary teachers should have at least two years of specialist study was strongly defended this week by Professor William Taylor, chairman of the Government's accreditation body.

Professor Taylor, giving evidence to MPs from the Select Education Committee, denied that the requirement - one of the criteria used by the Council for the Accreditation of Teacher Education in approving teacher training courses - was intended to turn out

specialist primary teachers on the "secondary model".

He said the requirement was a vital element in the education of primary teachers. He argued that through studying a subject in greater depth one acquired ability to study, discipline, methodology, self criticism and many other skills required by a teacher.

The requirement has been opposed by many institutions which have argued that it will overspecialize primary teachers to the detriment of their abilities to teach a broad range of subjects in the classroom. A number of courses have not been approved because they did not contain this requirement.

Another reason for institutions not gaining approval has been a requirement for teacher trainers to have recent school experience. Professor Taylor said that they had found that in some institutions at least half of the staff had had no experience of schools in the last 10 years.

THE THREE PILLARS OF WISDOM

was first privately printed as were many - now famous - works. With increased costs traditional methods of publication ceased to be viable. Computer technology has altered this situation. For details on a private publication service which includes distribution to major university libraries write to: SILBO PUBLICATIONS, P.O. Box 473 London SE12 8NN

Business places top poly lists

by Karen Gold

Demand for polytechnic places on business and management degrees and diplomas is seven times as great as for places in electrical and electronic engineering and sociology.

Applications to the new Polytechnics Central Admissions System, running for the first time this year, show there are around 28 applications for every business and management place, compared with four applications for every place in sociology, electrical and electronic engineering. (The figures are comparative; there are more places in business and management than on the other courses, but far more applicants.) The figures have been compiled by comparing PCAS applications with government estimates of first-year polytechnic enrolments in 1985, unlikely to change much in 1986.

The distribution of 440,000 plus applications to reach PCAS so far (averaging 3.75 per applicant) shows a huge variety in the competition for places. The average number of ap-

plications per place is 12. But there is a wide spread between 28 and four. Law is highly competitive, with 23 applications per place. So is geography, with 19 applications for each of a relatively small number of places. Biological sciences are heavily over-subscribed too: 16 applications per place.

Subjects which are less competitive than average include all kinds of engineering – though civil and mechanical are more competitive than electrical and electronic – surprisingly maths and computing, accountancy, economics, and architecture and town planning. All those range from 11 to seven applications per place.

The figures are not exact, because the PCAS and Government figures are not entirely compatible, and because both have difficulty categorizing combined and modular degrees. But they give a strong indication of the different competition faced by would-be polytechnic students.

Cheltenham stakes, page 9

UEA study stresses 'social stigma' of jobless

by Peter Aspdon

Nearly two-thirds of jobless claimants questioned by a university research team in East Anglia and "negative attitudes" towards visiting their unemployment benefit office, and many had become lethargic and pessimistic about ever finding another job again.

The team from the University of East Anglia has been monitoring the people's experience of unemployment in Great Yarmouth over the last six months, and found that the social stigma of their position is still the worst thing they have to learn to cope with.

In an interim report, the researchers compare those who have been unemployed for a long time with "laboratory rats in a cynical testing box which offers no escape route and inflicts punitive shocks for no logical reason".

While many of them found job centres helpful and comfortable, the general attitude towards unemployment benefit offices, characterized by "stark, bare rooms with protective

screens between staff and claimants" was a different story.

Only 10 per cent of the claimants had a positive attitude to their benefit offices, while 46 per cent were unambiguously and vociferously hostile, and another 15 per cent tended to have a negative attitude. The UEA report says these figures reflect a problem of research analysis, however.

"Claiming benefit is an emotionally fraught moment for many people, it is a reminder of their failed performance in a world where employment gives status and it is undoubtedly a situation of great inequality – between a powerless citizen and a 'state official', it says.

"This meant that the psychological perceptions of the 'customer' did not always reflect the social reality. Blanket condemnation of staff working in benefit offices was misleading and unfair, although the atmosphere of the offices themselves contributed to the stigma felt by claimants.

Out of the sample of 146 unemployed people, 48 per cent were pessimistic about their job prospects.

Threat to clinical teaching

by Carmel McQuaid

The dean of the medical faculty of Queen's University, Belfast, has warned that the current redistribution of National Health Service resources will erode clinical-based teaching in Northern Ireland.

A chair of midwifery and gynaecology has been scrapped already at Queen's and a chair of medical computing seems set to disappear. A chair of surgery has been redeployed only after protests.

Medical lecturers in the province have a different contract (to their counterparts elsewhere – they are employed jointly by the health boards and hold paid consultant positions in the teaching hospitals).

Education cuts, however, have meant that salaries paid to academics are now no longer on a par with those of NHS consultants who do the same work. This means extra difficulties for Queen's "new blood" recruitment, already at a disadvantage because of the province's political problems.

"We have always had to produce an attractive package as vacancies here never draw as many applications as elsewhere," Professor Love explained. "But in future we will be working against yet another constraint."

"Academic medicine is being squeezed on both sides. On the one hand, we are obliged to say 2 per cent per year over the next five years, which means getting rid of staff, whose salaries account for 75 per cent of expenditure. But medicine is not just one subject. Eur, nose and throat surgery is not the same as eye surgery, which is different from bone surgery. But the Government sees it all as simply surgery. So those small departments where we need an academic input are threatened."

"Then there is a general feeling at the Treasury that Northern Ireland spends too much on the health service and we are being asked to redistribute resources in that sphere as well. But we rely heavily on the NHS component to provide a base for our clinical teaching."

Professor Love argues that current provisions make no concession to the crucial role Queen's plays in clinical practice.



An Oxford first – for these three students who have claimed a resounding victory for women's lib by gaining the top three posts within the Oxford Union. From left: president Jeya Wilson, treasurer Emma Jenks, and librarian Sally Marlow

New BED lacking in specialist strength, says HMI

Her Majesty's Inspectorate says that Sheffield City Polytechnic's new BED degree is an improvement of its old one but that it fails to provide students with any primary specialist strength.

In its report on the polytechnic's initial teacher training, based on a visit in February last year, HMI says the primary phase – the new degree is divided into a primary and secondary phase – also fails to offer students adequate study of any aspect at their own level.

But the inspectorate stresses that the new degree has given more attention to blending education and professional studies and has well-distributed block teaching practices totalling 22 weeks. It expresses some concern about the uncertain nature of the last two years of the BED, which at the time of the inspectors' visit had not yet been validated.

HMI points out that some good teaching models were observed but that not all of them were of the standard. For example, pressures of the time sometimes restricted the range of teaching styles to the transfer of information with little involvement expected of students.

On staffing, HMI says although tutors have appropriate academic backgrounds for their work, many had recent full-time school teaching experience – a criticism made of practically every institution.

It emphasizes that the polytechnic needs to provide opportunities for tutors to update and to ensure coordination of their contributions.

The inspectorate is also critical of two of the five sites on which the polytechnic provides teacher training.

Expanded prison education urged

A widening of educational opportunities is urged by Her Majesty's Inspectorate in an examination of provision at Kirkham prison in Lancashire.

Senior consideration should be given to an extension of training and education opportunities into such fields as small business skills at the prison, the inspectorate report says. It also suggests the growth of Open University courses and other forms of open learning.

Commenting on the approach of the education staff at the prison, the inspectorate says staff demonstrated commitment and quality, and also achieved credibility and respect from other departments and staff within the prison.

The work of the prison education staff ably demonstrated the positive

purpose of open confinement for those deemed suitable, the report adds.

Acknowledging the commitment of the education staff to a full programme of education, the report recommends extending provision to incorporate numeracy, computer literacy and the ability to cope with changes in society as essential ingredients of prison education.

Volunteers could assist in basic education, while the extent to which education programmes cater for inmates at work or with intellectual interests should be reappraised, the report advises.

Report by HMI on Education Department, HM Prison, Kirkham, available from DES, Publications Despatch Centre, Honeyott Lane, Stanmore, Middlesex HA7 1AZ.



Like all intellectuals and most academics, I am hooked on detective stories. It is a compulsion that may go back to childhood when, as a result of picking up a paper the wrong way, I learned to read upside down before I got it the right way up. (It is a skill of great advantage when talking to a senior official in a police station sitting on the opposite side of the desk.) But my real education in thrillers took place when I spent nearly two years in hospital, from the age of 12 to 14, and read every thriller in the hospital library, demanding more when it ran out.

Every fortnight my father came to see me and brought good books about literature and philosophy for me to read. I ignored them. By the time I left the hospital I was reading a detective story a day and could spot the denouement long before the end. And it was especially the thrillers writers that I found – and still find – most compulsive. I have read every story by Dorothy Sayers, probably all by Margery Allingham and Ngaio Marsh, and may even have read everything by Agatha Christie though there may still be surprises in store. After all Hercule Poirot lived to be at least 119 and might turn up again.

That calculation about his age came in a generously informative lecture about the art of the detective novel by P. D. James at the Royal Society of Arts last year. It led to an inextinguishable discussion which not surprisingly started with the question why women particularly excel in this genre. The lecturer suggested that it might be that women use the form to sublimate an aggression which is just as great though less overt than that of men.

I wonder. I have always been fascinated by the fact that the great women crime writers seem to need a hero who is something more than a detective. To that of course Poirot was an exception, but apart from his great age he was in any case an oddity.

Dorothy Sayers' hero, Peter Wimsey, is the younger brother of a duke which enables her to be excruciatingly snobbish; Margery Allingham's man, Albert Campion, is some mysterious offshoot of a family of quite amazing nobility; Ngaio Marsh's Roger Akroyd is a gentleman with a brilliant wife, both of which are a constant surprise to the ordinary folk who meet him for the first time. And P. D. James' policeman Adam Dalgleish is a poet. His poetry first appeared in *Unnatural Causes* and is respectable – not surprising, because he was inspired by the stupendous Blythburgh church.

P. D. James also had a good article in a recent *Observer* neatly entitled *Natural Causes* which explained her involvement with the coast of remote, wind-swept East Anglia and "the cold, heaving, scouring mass of the North Sea". She owned to a claustrophobic fear of mountains and a love of wide skies, marshlands and the solitude of estuaries.

To anyone brought up among mountains and always longing to see more of them, that is surprising. But the peaks of the landscape giving her the first suggestions for a story and a plot; and that may explain what is for me the strange and often haunting quality of her writing. With great skill her TV producer found the ideal actor to be Dalgleish; Roy Marsden has become, without the suspension of disbelief, her reserved, competent, sensitive, unspectacular detective. And he is at home in the wide skies and the marshlands.

Patrick Nuttgens

Call for transplant of clinical research

by Jon Turney
Science Correspondent

The Medical Research Council last week endorsed a report calling for amalgamation of the two main MRC-supported centres for clinical research – the £10 million a year Clinical Research Centre in Middlesbrough and the Royal Postgraduate Medical School in Hammersmith.

The report, from a working group set up under Sir Michael Stoker to review the CRC does not say how the union should be brought about. But it does close with a recommendation that if it proves impossible, the CRC should not be maintained on its present site.

Staff at the CRC see benefits in the promotion of a national centre for clinical research, but the institute's

director, Sir Christopher Booth, reacted angrily to the report's argument to bring the CRC's independent life to an end, whatever happens. "For council to state that without doing any analysis of the science of the centre or its cost-effectiveness is irresponsible," he said.

Sir Christopher said although there was enthusiasm among staff for a new initiative in clinical research, there was also deep scepticism over the council's ability to find the cash for an expensive merger of two large institutions.

Sir Michael Stoker's report recognizes that any move toward amalgamation will be costly, and complex, involving negotiations between the MRC, the Department of Health and Social Security, the regional health authority which administers North-

wick Park Hospital – of which the CRC is a part – and London University, which oversees the Royal Postgraduate Medical School.

But the report says the council should not shrink from a radical change, as there is weakness in both the existing centres which means clinical science in the UK is in danger of losing its international competitiveness. It stresses that the new centre should have a major basic science component, and suggests that in the long term it might also be merged with the MRC's second giant laboratory complex, the National Institute for Medical Research at Mill Hill.

The report will open a wide-ranging debate about the best way of managing the MRC's responsibility for clinical research and the degree of competition

for cash between basic biology and work with patients in hospital. The founding of the CRC at Northwick Park 15 years ago appeared to mark a commitment to the clinical research to a general hospital, rather than a specialist teaching hospital, but the new report points in the opposite direction.

Sir Michael's report recommends that the council spend no more than six months considering the options raised by the damage done through uncertainty over the future of the 450 staff of the CRC and the MRC's employees at Hammersmith.

Clinical Research Centre Committee – Report to the Medical Research Council. Available from Mrs A. Gillingham, MRC, 20 Park Crescent, London W1N 4AL. (01-636 5422).

Top results gained by mature students

by Maggie Richards

Mature students lacking suitable entry qualifications are obtaining better degree results at university than their younger undergraduate counterparts, according to the findings of a new Joint Matriculation Board study.

Adults who fail to satisfy normal entry requirements are less likely to abandon their studies; less likely to be unemployed after graduation; and more likely to stay on for research or further academic work, the study says.

"Universities should not have any misgivings about admitting carefully selected adults lacking recognized qualifications," it adds.

Compiled by Professor Alan Smithers and Ms Alice Griffin from the department of education at Manchester University, the study examines the progress of mature students admitted via the JMB's special entry procedure to five universities associated with the scheme: Manchester, Liverpool, Leeds, Sheffield and Birmingham.

The study focused on adults who applied to the JMB in the years 1975 to 1980, and concentrated in particular

on the intake of 1980. Of the 1,208 adults who inquired about the scheme that year, 706 did not proceed and appeared to lose confidence when faced with the matriculation procedure. Of the 502 applicants, 187 became eligible for entry to university – 141 on the results of an examination, and 46 on the basis of an interview. Nine out of 10 of the final intake of 174 obtained degrees.

The analysis of JMB applications over the five year period revealed 31 per cent of inquiries were from adults in manual occupations. Of the 2,159 applicants, 40 per cent passed the entrance requirements.

The study points out there is now a growing body of adults who want a higher education, but with reductions in overall student numbers mature students face increasing competition.

One solution would be for the University Grants Committee to shield mature students by imposing quotas as it does for overseas students.

The Progress of Mature Students by Alan Smithers and Alice Griffin, published by the Joint Matriculation Board. Price £10.75.

ILEA stands firm on cuts

Members of the Inner London Education Authority, acting on the advice of their officers, this week refused to set a budget which would mean cuts of more than £25 million in the city's polytechnics and colleges.

The decision sets up a confrontation with Sir Keith Joseph, Secretary of State for Education and Science, who will ask Parliament next week to approve a maximum precept for the interim authority succeeding the ILEA.

Mrs Frances Morrell, leader of the ILEA, said that the proposed precept of 77.25p would leave the new authority some £80 million short of the amount needed to maintain services and cope with the additional costs incurred through the abolition of the Greater London Council, which has always provided administrative services for the ILEA.

To meet the shortfall, two out of three teaching and lecturing vacancies would remain unfilled. Officers calculate that pay and prices would have to be kept within 3 per cent inflation for the balance and reserves would be run down to the point where it was likely that the interim authority would be unable to meet its financial commitments for the year.

The figures are contested by the Department of Education and Science, which has asked for an urgent "meeting to resolve misunderstandings".

Degree of help

A new postgraduate course aimed at finding long-term solutions to food shortages throughout the world has been launched jointly by Kent University and Wye College, London.

The MSc degree in the conservation of soil fertility will be taught by lecturers from both institutions, combining Kent's research in agricultural science with Wye College's experience in the theory and application of soil and plant sciences.

Investment in South Africa challenged

by Peter Aspdon

A lecturer and a group of students studying South African history at Bristol University have called on the university to withdraw its investment from the Rio Tinto Zinc Company in South Africa and take a "firm moral stance" on other investments in the country.

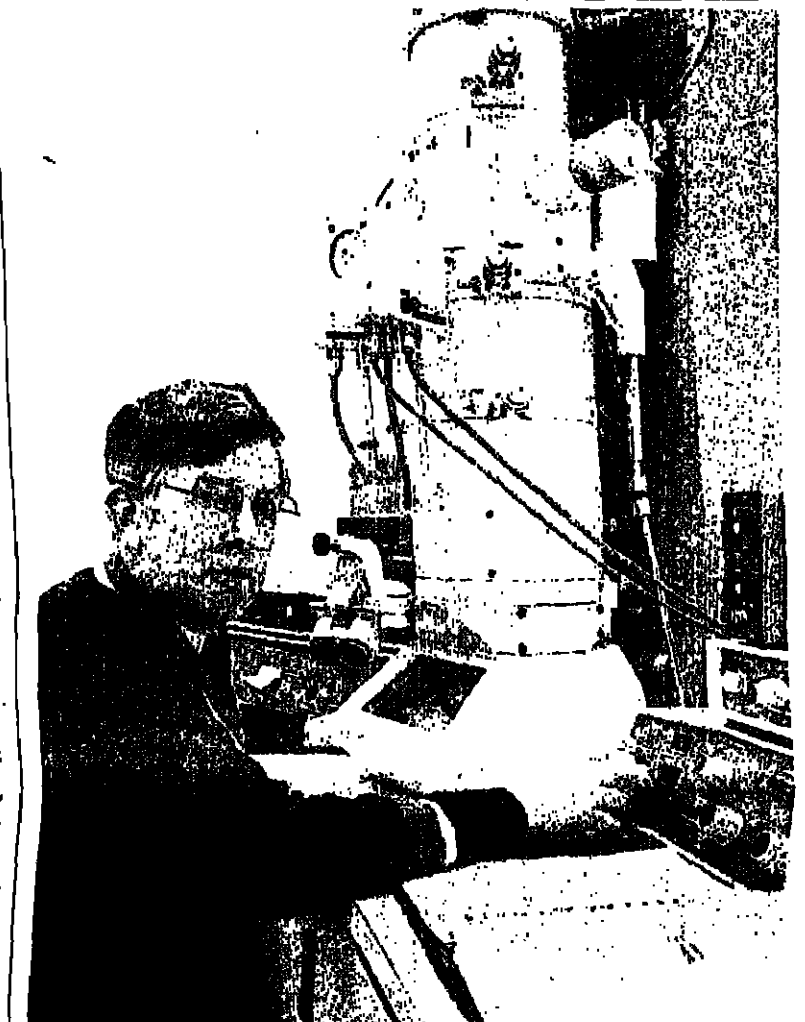
In an open letter to all university members, the group said that disinvestment was a more realistic means of "declaring the moral stance of Western countries and investors to apartheid and South Africa's control over Namibia."

"Our reading on South African history suggests that British people and British interests were significant in shaping the nature of the modern South African state and have continued to benefit from the racism and economically divisive system of apartheid."

A student spokesman for the South African history seminar group said the significance of the appeal was that the 10 students and the lecturer, Dr W.J. Beinart, were non-political and non-aligned, and reflected the growing concern in the university about its investments.

The Rio Tinto Zinc connection was particularly important, because of the company's extensive mining operations in Namibia. The Commonwealth prime ministers' conference and the United States government had agreed on limited action in this sphere, and said the letter.

"While disinvestment may not be a long-term solution to the world's problems, it has become a central issue in attempts to hasten the process of political change in Namibia, Africa's 'last colony', and to preserve some of the mineral wealth of that country for future generations."



Close-up view: Professor Brian Ralph, director of the new Institute of Materials at University College, Cardiff, operates the institute's high resolution electron microscope, capable of magnifications in excess of one million times.

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Confusion over future of Leith staff

Lothian regional councillors have agreed in principle to take control of Leith Nautical College, one of Scotland's 16 central institutions.

But there is still confusion over the future of the college's staff, half of whom are already poised to lose their jobs following a decision to centralise Scottish nautical education in Glasgow.

During the last two or three weeks there have been protests from the Conservative benches that the Westland issue had been blown up out of all proportion. Ronald Dutt in *The Times* referred to it as this "essentially trivial affair". And, of course, the future of Westland helicopters is not a matter of overwhelming national significance. The argument over the development of a European defence industry is of substantial significance but, even here, there are other areas of technology and defence equipment manufacture that are of much greater significance than the area of helicopters.

But the argument is not about helicopters or the future of Westland. It is about whether Mrs Thatcher has told the truth or not or whether she has deliberately sought to evade telling the truth.

When I was parliamentary private secretary to Roy Jenkins when he was Home Secretary it was found that the Home Office had increased the television licence fee without going through the full legal procedures. The Government had not been entitled to extract the increased fee from people which had been demanded of them. I

PARTY LINE

Uncovering the Westland boil

remember a meeting with officials and junior ministers at the Home Office at which various ways of getting round this problem were discussed. I retain a very clear recollection of the Home Secretary's conclusions at the end of that meeting. "When you have a bad boil the best treatment is to lance it". The Home Secretary went down to the House, accepted the mistake, apologized fully for it, and took immediate steps to rectify it. There was a great furor before the event but hardly a ripple after it. It is difficult for opponents to make much of such a genuine acknowledgement of a fault and an apology for it.

There is an important political lesson in this which Mrs Thatcher may finally regret she did not learn in relation to the Westland affair. I am not sure an immediate confession would have got President Nixon

out of the mire over Watergate but even there it would have considerably lessened the damage which the affair finally had upon his fortunes.

The trouble is, of course, that one cover-up leads to another. I found the sight of Tory MPs rallying round to support Mrs Thatcher's attempt to brazen it out quite sickening. And, worst of all, was the sight of Mr Heseltine himself doing a complete about-turn and joining the rest of the frightened rabbits running for cover as the Conservative Party and Mrs Thatcher plummet in the polls.

Clearly Mr Heseltine had done a deal in his meeting with the Government Chief Whip. Heaven knows what it was. Having fought Mrs Thatcher tooth and nail and having played the role he has in the affair over recent weeks, it was absolutely staggering to hear him say during

the emergency debate: "I could not have asked for words other than those that my Rt Hon Friend the Prime Minister used" and "I believe that what the Prime Minister has said today brings the politics of this matter to an end". Loyalty is a very important virtue, but like most other attributes, it becomes very dangerous when pushed to the extreme.

The loyalty of many Conservative members has been tested considerably over recent times. No one knows what the final fallout of the Westland affair is going to be. I can only hope that it will encourage more of those dissenters both in the Government and on the back benches to demonstrate that they have been wrongly labelled "wets". Until now they have been seen as anyone can imagine. They have not been prepared to even bristle, never mind wound, the Government.

Surely the unemployment figure last week are the final nail in the coffin of monetarism. For several years the "wets" in the Government and on the back-benches have not been able to shift the Prime Minister and her henchmen from the disastrous economic course that they have been following. There is now a total vacuum in Government, thinking on economic policy. For the chancellor's various announcements in recent months impossible to see in what direction he is seeking to go. A hairy path from the likes of Ken Baker and Ken Clarke in the Government, supported by others of similar persuasion on the Tory back-benches, could shift the Chancellor in his Budget more to the left than that some of us on the Alliance have been advocating for the past few years. It would not help us politically, but for the sake of the unemployed, and the whole future of our country, I hope they will grasp the nettle now while they can.

Ian Wrigglesworth
The author is Social Democratic MP for Stockton South.

Such an approach

Old school ties should end

by David Jobbins

Students who attend public schools should not receive a grant towards their higher education, according to the Socialist Education Association.

In its response to the Green Paper, the SEA says that while all undergraduate courses should attract a full grant at an "adequate" level, national financial stringency might mean different treatment for the products of private education.

SEA general secretary Mr Graham Lane said: "Those who wish to benefit from private schooling until the age of 18 cannot be expected to return to the state system for their university studies and to receive a grant with the fees being paid by Government."

And the SEA, adopting a much harsher line than the Labour Party, adds that parents of the better off may be required to contribute through a claw-back mechanism.

It demands more students with non-conventional qualifications, an increase in mature students and reform of the schools' examination system. A single planning body would replace the University Grants Committee and the National Advisory Body for public sector higher education, but organization would be regionally based.



Rt Rev Graham Leonard, Bishop of London

Church mounts attack on cuts

by John O'Leary

The Church of England has mounted a wide-ranging attack on Government policies in its response to the Green Paper on higher education.

Only in its opposition to an "over-arching body" to plan the whole of higher education does the Church agree unreservedly with the Green Paper. The effect of such a policy, it says, would be to undermine the autonomy of the universities.

The Church believes that cutting public spending is the dominant theme of the Green Paper, rather than developing higher education. "The philosophy implicit in this approach appears to the board to be utilitarian and unchristian," the response says. "The paper as a whole offers neither inspiration nor vision for educational development in the tertiary sector."

It takes issue with the perceived implication that higher education has been responsible for Britain's failure to produce more qualified scientists, engineers, technologists and technicians. "There is no evidence whatsoever that suitably qualified students in the sciences are being denied places in higher education," says the Church's board of education.



Value for money is accepted as a reasonable criterion for assessing the performance of higher education, but the indicators adopted by the Department of Education and Science are challenged. The Church believes, because they undervalue the contribution of those in low-paid jobs such as the clergy, teachers and voluntary workers.

The response takes issue with the Green Paper's assertion that degree work is better done where there is a concentration of advanced work and that this is more important than easy

The wave of hostility to the Government's plans for higher education showed no sign of abating as the consultation period ended last week.

Criticism of the Green Paper, "The Development of Higher Education into the 1990s", continues to come from almost every quarter.

The only friendly voice for the Government this week is from the Engineering Council which roundly condemns the lack of realism of other reactions.

The board, chaired by the Bishop of London, the Rt Rev Graham Leonard, criticizes the Green Paper for its attack on the arts and rejects any implication that arts provision in the public sector is of inadequate quality. It also finds the Government's new policy of targeted assistance for overseas students too narrowly aimed, failing to help those from the poorest Commonwealth countries.

Engineers welcome constructive proposals

The Engineering Council comes out as a strong supporter of the Government's approach to higher education in its response to the Green Paper.

The council, which regulates the main professional qualifications for engineers, wants the eventual White Paper to go further in some areas, especially in rewarding institutions which attract external income. It says they should get increases in their basic grants, even at the expense of other institutions less successful in boosting their funds from outside sources.

The council also suggests use of financial rewards and penalties as the best way to promote closer collaboration between universities and polytechnics in each region. And it wants the DfES to ensure funding of degree courses from one source to ensure proper distribution of resources between universities and polytechnics.

The council stresses it endorses the overall thrust of the Green Paper, saying it has "no sympathy with the

perverse reactions which greeted its publication". It calls for earmarked funds to establish a higher baseline for expenditure on engineering education and for greater rewards for lecturers in subjects where industry competes for highly trained people.

The council warns that skill shortages will be a continuing problem if the Green Paper's projection of student numbers is correct, and says all government departments with relevant interests must collaborate to tackle them. And it says the number of maths and physics teachers in schools will be the crucial factor in the success of any attempt to steer more potential university entrants into technical subjects.

Other measures proposed in the council's response include better design of engineering courses, greater training places in industry, and better entry requirements for higher education institutions.

Low school turn-out of scientists 'will hit research'

The Royal Society warns in its response to the Green Paper that the adherence to the lower end of a range of projections for the future student numbers is likely to be a self-fulfilling prophecy. And the society regrets that no reasons are advanced for preferring the lower projection.

The society joins the Engineering Council in warning of the disastrous low numbers of physics, maths, and craft, design and technology teachers in schools and their effect on future graduate supply.

On research, the society supports the principle of selective research funding, but it warns of problems from pressures on universities to do more short-term, applied research at the expense of basic research. It says the Government's wish to see more research paid for from private sources will strengthen this trend and

weaken Britain's base of fundamental research.

The response says the Green Paper should have tackled the problem of too many old staff universities, and is lukewarm about the Government's ideas on differential salaries for academics - which it says would create "grave difficulties".

It says there should be more effort toward staff development in academic institutions, as the Green Paper suggests, but this will only happen if there is money to back it.

In addition, the society welcomes the assurance that donations to universities will not mean any reduction in government funding, and suggests such donations could be encouraged by matched contributions from the Exchequer, as an alternative to tax incentives.

Social mobility under arrest

Ministers have been accused of seeking to halt upward social mobility through its projections for student numbers in higher education.

In its response to the Green Paper the Social Democratic Party says that Government projections are "nonsense" and amount to a clear policy of "arresting upward social mobility rather than an objective observation of trends".

The party accuses the Green Paper of serious omissions - no planning for continuing education and no discussion of student finance.

Mrs Anne Sofer, chair of the party's

education policy group, said: "The Government says it wants a higher education system which will serve the needs of the economy, yet it is planning for one which will fail to increase the number of those with technological skills; produce too few graduates for the needs of industry and the professions; undermine and underfund British research; and offer no practical help to collaboration between industry and higher education."

The party's policy-making council for social democracy has backed a strategy for education and training of 16-19 year olds.

Students angered by criticism

by Olga Wotjas
Scottish Correspondent

Scotland's eight university student unions have condemned the Green Paper for making unsubstantiated allegations about their activities.

In a report, "The Case for Social Unionism", endorsed by the National Union of Students (NUS), they claim that the Green Paper's "stereotypical" view of student unions "depends almost entirely on striking examples and telling anecdotes".

It is unacceptable and unjust to highlight unrepresentative incidents without mentioning the thousands of welfare problems successfully solved by student unions, the quality of research done by the members of student unions, and the success of the Green Paper's proposals.

The Green Paper states that union policies and actions are not always representative of the student body as a whole, says the paper, but it stresses that all students have the opportunity to participate and make their views known.

"It would be impossible to consult daily with every student in our institutions, just as it would be to expect Members of Parliament to consult each other's constituents."

All the practices which the Government is imposing on the trade union movement are already carried out by the student unions, including campus secret ballots, referenda, regular changes of leadership and regular consultation with members, says the paper.

Membership of a students' union must be automatic rather than voluntary, it maintains. The unions would not be financially viable without automatic membership, and if even a small minority did not affiliate, the union could no longer claim to represent students.

If membership were voluntary, students first coming to university would be unaware of the range of facilities offered by the union and could not make an informed choice.



Mrs Anne Sofer

£15m pay windfall for academics

from Geoff Maslen

MELBOURNE

The Australian government is to give almost Aus\$30 million (£15 million) in back pay to academics employed in commonwealth and state tertiary institutions.

The academic salaries tribunal, which advises the federal government on pay scales for those teaching in higher education recommended in April 1984 that academics get a 5 per cent pay rise.

To the consternation and outrage of the academic community, however, the tribunal changed its mind. The government, which had found itself trying to cope with a severe recession, persuaded the tribunal in a subsequent decision in June that year to phase in the rise with 2 per cent from April 1984 and the remaining 3 per cent from April 1985.

Academic staff associations appealed to the federal court against the government's adoption of the recommendation. A full bench of the court upheld the appeal and the government has now agreed to pay the full 5 per cent increase from the April 1984 date

originally set down. The decision will see Australia's 1,000 professors receive a happy windfall of more than Aus\$1,500 while their more numerous but lower paid colleagues will get Aus\$500.

Following recent national wage increases, professors in Australian universities will now be paid Aus\$57,000 a year while at the other end of the pay scale tutors will receive Aus\$19,355.

The Australian minister for education, Senator Susan Ryan, has meantime decided to try to make some savings elsewhere. She has decided that deductions will be made from federal grants to 10 universities and two colleges of advanced education because, she says, they paid their chief executives and deputies too much.

In a press release, Senator Ryan named the universities and colleges and the amounts involved. These ranged from Aus\$4,000 to Aus\$5,000 for most institutions but exceeded Aus\$10,000 at the South Australian Institute of Technology which was paying most of its staff salaries negotiated with the approval of a state industrial commission.

Senator Ryan said the universities and colleges had paid their chief

overseas news



Susan Ryan: savings ahead

executives in 1985 more than the amounts recommended by the academic salaries tribunal.

She said her decision to penalize the institutions was consistent with the approach taken last year when similar adjustments were made because of alleged overpayments in 1983.

Senator Ryan said: "It is entirely inappropriate at a time of scarce educational resources for salaries in excess of the tribunal rates to be paid. I urge all institutions to accept their responsibilities in this regard."

It is clearly the principle of the thing that concerns Senator Ryan. The sums involved seem to be trifling compared with the government's Aus\$2,000 million a year outlay on higher education.

At the University of Sydney, for example, the government claims the vice-chancellor was overpaid Aus\$5,285 last year and has deducted this amount from its grant to Sydney of more than Aus\$128.5 million.

During 1985, the salaries of vice-chancellors and their deputies were reviewed by the tribunal. It reported last November that it had recommended increases of more than 10 per cent for the heads of Australia's biggest higher education institutions and

some 7 per cent for those in charge of smaller universities and colleges.

The Australian cabinet has yet to approve the tribunal's recommendations. If it does, senior vice-chancellors will receive annual salaries of Aus\$65,000 and their junior colleagues will get Aus\$39,000 a year - princely sums in this country where the average wage is about Aus\$5,000 a year.

Caxton tome safe with new technology guru

from William Norris

WASHINGTON

One of the world's most important private collections of early English language books and manuscripts has been bought on behalf of the University of Texas for \$15 million. The collection, known as the Carl H. Pforzheimer Library, consists of more than 1,100 volumes and 250 groups of letters and manuscripts dating from 1475 to 1700.

It includes what is believed to be the first book printed in English by William Caxton, the first English Bible, 18 Shakespeare quartos and four folios, the first collection of John Donne's poems, first editions of Milton, Spenser and Ben Jonson, and the first translations into English of Homer, Aristotle, St Augustine and Cervantes. There are also letters written by Queen Elizabeth I concerning a suitor's marriage negotiations.

The collection was bought from the Carl H. and Lily Pforzheimer Foundation of New York by H. Ross Perot, the Dallas computer billionaire. The university is to start a campaign to raise money to pay him back. Until now, access to the material has been strictly limited, but it will now be open to any qualified person with a legitimate reason for using it. The collection will be kept at the Ransom Humanities Research Centre in Austin, Texas.

Mr Pforzheimer, a banker who died in 1957, purchased the books and manuscripts from private collections in England, beginning in the 1880s. His library has been up for sale since 1977, and Texas University

already has a Gutenberg Bible purchased from it in 1978.

Mr Perot, chairman of Electronic Data Systems Corporation, admits that his knowledge of great books is "not much" but he has become known for being willing to spend his wealth in an effort to improve the cultural standing of Texas. Asked at a press conference whether the money would not have been better spent in strengthening the university's high technology disciplines, he replied: "No. I spent my entire adult life in advanced technologies. The worst mistake we could make is to turn out large numbers of technological robots."

Highlights of the collection include:

● *Recuyell of the Histories of Troye*, by Raoul Le Fevre, a 1475 volume believed to be the first work printed in English by William Caxton. There are seven other books printed by Caxton.

● A copy of the 1535 Coverdale Bible, the first printed completely in English, and three copies of the first edition of the 1611 King James Bible.

● The four Shakespeare folios of 1623, 1632, 1663 and 1685 - along with the first editions of the second, third and fourth.

● First editions of Spenser's *The Faerie Queene* (1590), Ben Jonson's *Every Man in His Humour* (1610), Captain John Smith's *General History of Virginia* (1624), Milton's *Paradise Lost* (1667), Thomas Hobbes's *Leviathan* (1651), and John Locke's *An Essay Concerning Humane Understanding* (1690).

EAGLE will now oversee supply of grey matter

from Jane Marshall

BRUSSELS

Development of SIGLE, an information system which provides researchers with access to unpublished documents in seven European countries, will continue under EAGLE, a new association based in Luxembourg.

With four-year backing from the European Commission, a group of documentation centres in Europe decided in 1981 to develop a cooperative information system which would identify and supply "grey" literature. This includes reports, minutes, technical documents, papers, regulations, working documents and notices which are issued by local authorities but not published, and are therefore unobtainable through normal commercial channels.

The centres set up SIGLE - the system of information on grey literature in Europe - to identify, acquire and control the information, which covers the fields of scientific research, technology and social and economic sciences.

The system will now be developed further by EAGLE - the European association of grey literature exploitation - which consists of the main documentation and information centre in Belgium, Britain, France, Germany, Italy, Luxembourg and the Netherlands. EAGLE will continue services to users in Europe through the SIGLE data base, which is available for on-line documentary research through Euromet Diane, accessible in the United Kingdom on blade-line.

Further information on EAGLE and SIGLE's data base is available from Marcel Maurice, at the Commission of the European Communities, DGDX111 - A-2, L-2920 Luxembourg.

Soviet rector denies allegation of anti-semitism

A senior Soviet academic has publicly denied any discrimination against Jewish applicants to Soviet universities.

Writing in the Odessa newspaper, *Znamya Kommunisty* (Banner of Communism), the Rector of Odessa University, Viktor Serdyuk, denied allegations that the number of Jews studying at Soviet universities is being "steadily reduced", or that "students of Jewish nationality are being unfairly excluded from universities".

Serdyuk was replying ostensibly to a message from Dr William Kirwan, vice-chancellor of Maryland State University, expressing concern about reports of growing anti-semitism. He countered with impressive figures about the Jewish intake at Odessa University in 1985. Around 4 per cent of students overall were Jewish, and in mathematics and physics 8 to 12 per cent although the population of Odessa is only 3.6 per cent Jewish.

In fact, Serdyuk's figures could well be cited in favour of the opposite view. A survey of anti-Jewish discrimination in mathematics and physics carried out by two Moscow Jewish activists, Valerii Senderov and Boris Kanevskii some four years ago, focused on the four most prestigious universities in the country.

There is no evidence that any Jewish school leavers have been barred from higher education altogether but until 1984, they experienced difficulty in enrolling in the most prestigious universities and colleges. The high proportion of Jewish students enrolling in the mathematics and physiological faculties in Odessa therefore may point to discriminatory practices in Moscow and Leningrad.

In addition to denying discrimination, which, he says, is ruled out by the very nature of the socialist system, Serdyuk counter-attacks by pointing out to Kirwan that the USA has not acceded to the UNESCO conven-

tion on combatting discrimination in education, the UN convention against genocide, nor the international conventions on eliminating all forms of racial discrimination and on not applying the statute of limitations to war crimes and "crimes against mankind".

He calls on Kirwan to visit the Soviet Union, and in particular the University of Odessa, "to see how things are in reality".

Znamya Kommunisty, it should be noted, is a somewhat obscure vehicle for issuing such an invitation to a US academic. Soviet local newspapers are not readily available outside the Soviet Union, and the outside world would probably have remained unaware of Serdyuk's "open letter" to Kirwan, had not the Soviet press agency TASS put out a lengthy item on the subject.

When emigration to Israel was first permitted at the end of the 1960s, it offered Soviet Jews a choice. Many, undoubtedly, felt that they would prefer their present situation to the often thorny path to an emigration visa and the unknown difficulties of a new life abroad. Now, however, that emigration has virtually ceased and the hopes of a massive airlift of Soviet Jews under French sponsorship which circulated last autumn have failed to materialize, many Soviet Jews feel themselves trapped.

Significantly, when representatives of European and American learned societies met in Oxford earlier this month to discuss how to help Soviet Jewish scientists, the message which they received from Jewish activists in Moscow called for help to be concentrated on the emigration issue only.

"Put aside the difficulties encountered in our daily lives," the letter urged, "for if there is no breakthrough on emigration before the summit meeting next June then we are afraid that our situation will remain irreversible for a very long time."

The editor, Deborah Stone, said: "This was a vile destructive act," said Professor Thomas Roos, a faculty teacher. "It was brown-shirt bullying on the order of Kristall Nacht" - when in 1938 the Nazis burned down synagogues and Jewish shops.

The culprits, however, were unrepentant. From their new office adorned with pictures of Richard Nixon, they issued a statement claiming they had acted "to restore pride and sprinkle to the college we love so much".

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Apartheid protest smashed up

The shanty town which has stood on the campus green at Dartmouth College, New Hampshire, since last November, is no more. In the early hours of one morning last week, the three crude huts erected to dramatize demands that the college should sell its investments in South Africa were demolished.

A gang of 12 right-wing students armed with sledgehammers knocked them down, sparking a 30-hour takeover of an administrative building and the suspension of classes for the first time since the 1960s.

Dartmouth, which has the highest proportion of minority students of any Ivy League school, has a history of racial unease. Some 9 per cent of the 4,300 students are black. The shanties were erected after the university's administration had rejected a unanimous vote by faculty that it should divest itself of South African stock, and were allowed to remain for fear of a confrontation with anti-apartheid activists.

The students who carried out the demolition, 10 of whom are members of the *Dartmouth Review* - a weekly newspaper which has been an incubator for the new right - decided to take matters into their own hands on the night of Martin Luther King's birthday. They drove up in a truck and attacked the shanty town, sending two female students - who were sleeping there to guard the buildings - fleeing in terror.

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Government clampdown on left

from D. B. Udalgama

COLOMBO

Sri Lanka moves to exclude from state employment graduates and advanced-level students "who have close connections with extremist leftist parties" have been described by the Civil Rights Movement of Sri Lanka as being "reminiscent of the McCarthyist witch-hunt that stained the political life of the USA in the 1950s".

A former Prime Minister and minister of education, Mr W. Dahanayake, who is now an influential backbencher in the ruling party, has noted that, if such a policy had been followed in the 1950s and 1960s, Sri Lanka's universi-

ties, the civil service, the scientific and research institutes would have been denied the services of some of the ablest members of Sri Lanka's intelligentsia.

A newspaper report quoted an unnamed "senior government minister" as saying that such measures would be contrary to the right of freedom of belief and expressions, freedom of association, protection against discrimination on the grounds of political opinion and the right to equality before the law, all of which are guaranteed by the constitution.

In Sri Lanka public servants enjoy full political rights.

Peter Aspden reports from Paris on the European response to high technology

Learning the language of love ...

The continental penchant for analysing the nature of love, no matter how unlikely the circumstances, was much in evidence at a conference devoted to Europe's response to high technology, held at the University of Paris 12, Dauphine. Perhaps it was the city's notorious effect on the most sober of minds which turned the first couple of hours of the conference into an extended treatise on that delicate human condition.

The definition of love, observed Professor Jean Tezenas du Montcel, was two people looking in the same direction. That was the lesson which had to be learnt by Europe on the one hand and technology on the other.

This was clearly too trite for Mr André Danzin, another French delegate, who doubted the very existence of a united European response. Present-day Europe, he remarked, was a woman who desperately wanted to have a baby, but forgot that she was taking contraceptives. "The only solution she can find is to make love more and more often."

Quite apart from showing the extraordinary differences in style adopted by French and British academics in argument, the examples illustrated the general air of uncertainty which constantly inhibited the conference members from taking positive and optimistic initiatives. Not only the uncertainty of making European nations work towards a common goal, which has been documented often enough, but, more significantly, the suspicions and hostility which many academics instinctively feel when confronted by talk of shiny new toys.

The orthodox view of the need for co-operation was unveiled at the outset by Mr Danzin, president of the Centre d'Etudes Supérieures d'Electricité, d'Electronique et d'Informatique, who talked of the difficulties of transferring technologies from one generation to another, and the dangers of teenagers coming into an adult world which was completely different

from the one they learnt at school.

With robots beginning to replace labourers and the increasing need for a highly skilled workforce for tomorrow's industries, it was never more important for higher education to play its part in "teaching people how to learn". As new waves of technology succeeded each other, new skills had to be constantly picked up along the way as people became accustomed to a lifelong educational system which would be radically different from today's traditional degree/diploma structure, he said.

The philosophical analysis underlying Mr Danzin's remarks was that technological change could not be controlled, and educational institutions could do little more than adapt to changes as they came along, like a mountaineer attempting a difficult ascent who needed to be ready to face up to ice, stones, sun or snow. This characterized the "uncertainty approach" which saw universities as essentially reactive forces.

While many delegates, particularly the British, found Mr Danzin's speech frustratingly elusive, the themes with which he dealt represented the crux of the difficulties facing university/industry co-operation. Could it ever be an equal partnership, with suspicions allayed on both sides, or was the academic community destined to follow leads which were not necessarily of its own choice?

The dilemma was immediately presented, albeit in an even more abstract

Professor John Horlock: reference to private diploma threat



form, by Mr Riccardo Petrella, of the European Commission, who criticized Mr Danzin's espousal of the "adaptation culture", and stressed the need to control technological change to participate creatively. To most people, however, this sounded like forced optimism.

One of the most coherent scenarios for the coming years of change was constructed by Professor Dieter Seitz, of the University of Nürnberg-Erlangen, who brought home to the conference the massive costs involved in today's rapidly-changing technological world.

Universities alone could not afford such costs, which necessitate the replacement of expensive equipment every three years, and had to co-operate with large industries to avoid the development of an "education gap". In the meantime, small companies were able to develop more and more diverse applications of the new technologies in the wake of the

pioneering moves of their larger cousins - the Silicon Valley effect.

Universities, in this case, acted as a link for new products between large and small industries, or, in effect, between the big money and the market place. Asked for evidence that the remarkable rate of progress of recent years was bound to continue, Professor Seitz replied simply that the "market" would dictate it - and with that magic word, the disquiet of some of the hitherto reserved academics began to make itself heard.

People had little difficulty in accepting that the financial stakes in high technology had become so high that universities could no longer afford to stay at the forefront, where they differed was in the importance they gave to that point.

While Professor Tezenas du Montcel tried to reassure his colleagues that there was no dichotomy between survival in the new age and adhering to traditional scholastic values, there was

plainly a degree of tension in the various debates on the subject. The spectre of "what happens in the United States" was repeatedly drawn up as an example to be followed. Professor John Horlock, vice-chancellor of the Open University, made particular reference to companies giving their own diplomas and degrees, which posed a threat to the existence of universities and needed to be countered by swift action in the field of continuing education. The extent of direct lobbying on behalf of universities at congressional level was also cited as an unsavoury example of flitting too intimately with the elusive big business.

Mr Kjell Eide, of the Norwegian ministry of cultural and scientific affairs, also differentiated sharply between the raison d'être of a university and that of a successful company; the latter has a precise target and directs all its energies towards the satisfaction of a market. "The day universities are primarily directed towards markets is the day they lose the justification for their existence," he said.

He added that it was indicative of changing times that 15 years ago pan-European conferences were being organized by universities to examine the role they could play in helping the weaker elements of society. Now it was all industry, profits and markets. "They are all obvious allies, because they offer interesting work for academics and money, but any hint of a relationship of dependence would be a bad thing. We must retain an element of detachment and a willingness to take a critical stance."

At the end of the day, the questioning of universities' ability to remain aloof, commenting on the relentless advance of the new technology, must have emerged as a more urgent issue than the possibility of a united European response to the challenge.

Ultimately, it was clear that universities feel on the defensive when confronted by technology, despite the rhetoric of new dawn. Their most effective weapons must be to expand the strength and quality of research and scholarship; for at the delegate pointed out "The most sophisticated computer which could be invented is primitive compared to the head of a fly ..."

CALL for help finds a response

The Scottish Education Department is not often cast in the role of the Severn Cavalry.

But last week, it unexpectedly produced a £25,000 grant to save a unique project to help the handicapped, which was due to be axed next month.

The CALL (Communication Aids for Learners in Lothian) Centre, based in Edinburgh University, uses microelectronics to help handicapped children and adults with learning problems. It is unique in being simultaneously a research and service unit, covering the fields of education, health and social work.

Its team researches how both hardware and software can be adapted to enable handicapped people to use them to communicate. It assists and assesses a number of individuals, including children suffering from cerebral palsy and middle-aged stroke victims, as well as young people who are deaf, blind, autistic or mentally handicapped.

Sir Keith Joseph says we should be doing research that's more involved with the community," says the centre's researcher in computing and education, Phil Odor. "What we're doing is about as relevant as you can get."

The centre also acts as an information and resource base for professionals working with the handicapped, and for the handicapped themselves, and has run training courses for more than a thousand specialist teachers and therapists.

But ironically, the CALL centre's very uniqueness is proving its bane. The last minute reprieve from the SED will allow its work to continue for another year only. And it does not solve the lack of coordination between government departments, whose official view has been that no single agency is prepared to accept responsibility for it.

The centre was set up three years ago with funding from a variety of

sources, notably £70,000 pump-priming from the Department of Trade and Industry, Scottish Regional Development Fund, and Edinburgh University provided £13,000 for specially designed accommodation.

Its initial work was of necessity exploratory and it was only a year ago that the centre's advisory committee, which includes representatives from Lothian Regional Council, the DTI, the medical profession and the Inspectorate, decided that it should continue and extend its work.

The centre put in joint applications for funds to the SED and the Scottish Home and Health Department, but were told by officials from both departments that there is no statutory mechanism for collaborative funding by health and education.

The centre then applied to the departments separately, with proposals for joint service and research work, but were told at that stage that there are no funds available except for research and development.

The SED however, managed last March to find £35,000 from various budgets, to enable the centre to continue for another year. Mr Allan Stewart, Scottish Office minister for industry and education, made it clear that this was to give the centre time to find alternative funding, and the SED could not finance it permanently.

Nobody can accuse the centre of not trying to raise funds from elsewhere. It won approval in principle from the European Social Fund to set up training courses for teachers and therapists in Scotland. But this failed, because EEC money requires to be matched by central government funding.

The centre sent out letters to 2,000 firms, and former Scottish education minister Alex Fletcher took up the centre's case, hosting a reception for

the business community of the business community, of whom size three shoes are rare. The centre spent £4,000 on seeking this alternative funding.

"What we've demonstrated is that self-help doesn't work. What's the point of pump-priming if there isn't a well?" says Phil Odor.

Mr Stewart, in a letter to Mr Fletcher, has said that "one ray of hope" for the centre's future is the recommendation by Scotland's Microelectronics in Education Committee that CALL should be integrated into a Scottish national resource.

But Mr Odor and Professor Entwistle, head of Edinburgh's education department, maintain that the money available for the MEC's national plan is for development work only, not to establish specialist centres.

The SED had also suggested informally that it might be possible for the centre to be transferred to a directly funded central institution. But Phil Odor firmly believes that should remain within the university. This is not through any false notions of prestige but because of the different ethos and structure of the two types of institution.

"When you're working in an advanced technological field you need to talk them over," says Professor Entwistle.

The SED deserves praise for enabling the centre's work to continue for another year. But if the centre's work is to continue beyond that, it is imperative for the SED and the SHED to find a way of freeing themselves of the policy straitjacket which still jeopardizes the centre's future.

Olga Wojtas

Hedging bets in the Cheltenham stakes

Since last September, 118,143 people have made 443,863 applications to polytechnic first degree or diploma courses. To date, nobody knows whether that is better or worse than they should have expected.

The arrival last year of the Polytechnics Central Admissions System not only means that virtually all applications to full-time and sandwich first degree and diploma courses go through its Cheltenham headquarters. It also means that a whole new picture of who applies to polytechnics, when, how and why, is being created.

The first part of that picture is beginning to emerge at the PCAS, whose board meets later this month to decide what statistics should be published and researched from the mass of information now running through its computerized system.

The PCAS was set up between 1984 and 1985 by the Committee of Directors of Polytechnics, with one-third of its initial £625,000 costs met by the Department of Education and Science. The rest was met by the polytechnics, and by a £5 charge to candidates. From now on, it must be self-financing.

Flexibility

Its system runs in harness with that of the Universities Central Council on Admissions, using UCCA's course coding and computer and a similar timetable. But the PCAS has also insisted on certain differences: four choices of institution instead of five and none in preference order; more flexibility over dates; a different September "clearing" system.

The difference to institutions so far has been marked. Although the PCAS bulge of applications came a little later than UCCA's, over 40 per cent of those 443,863 applications arrived in December - that is still significantly earlier than Polytechnics are used to receiving them. One very large polytechnic last week that its applications were up from last year between 50 and 100 per cent - not on the total for 1985 but on this time last year.

That means considerably more pressure on admissions staff and more uncertainty. The chance for candidates to choose four polytechnics on their PCAS forms has probably led to a substantial increase in the number of applications without any clear indication of how this reflects the numbers of applicants.

In addition, the would-be university undergraduate who put in one late "safety net" application to a polytechnic may now be applying earlier with up to four choices - meaning that admissions tutors are faced with an unprecedented guess as to how many of the offers they make will be accepted and materialize as students in October.

In fact it appears applicants have averaged 3.76 applications each. Of those 246,857 applications were by men (56 per cent) and 197,006 by women. Of the total applications, 0.5 per cent came from overseas (22,470). Applications are still coming into PCAS, but at a relatively low level. Those that come in after the end of December are considered at the institutions' discretion.

Applications are spread very unevenly over subjects. The largest group by far - almost 23 per cent of total applications - applied for business and administration courses. The next largest group - social sciences - had 14.8 per cent of applicants; engineering had 11.4 per cent and all other subjects 5 per cent or less. (Except for general and combined

Karen Gold reports on the Polytechnics Central Admissions System

studies degrees - almost 7 per cent.) Knowing those figures means it is possible for the first time to judge the competition for particular courses in polytechnics. The PCAS figures are roughly, though not totally, compatible with DES figures showing the number of students enrolled on full-time and sandwich degree courses in polytechnics.

So the table, drawn up by The THES, shows first year enrolments in polytechnics in the present year unlikely to differ substantially from next year - compared with the number of applications so far to the PCAS. They show that the competition for polytechnic courses varies enormously. In theory (though this is applications and not applicants, so the figures should be treated with caution) it is seven times more difficult to get a polytechnic place on a business and management course than it is to get a place on a course in electrical and electronic engineering, or sociology.

Next most difficult, according to THES calculations, are law places, where there are 23 applications to every place (28 for business and management). Then comes geography (19 for every place) and the biological sciences (16). Overall there are around 12 applications for every polytechnic degree place.

The true number of applications per place will be easier to discover once the DES figures are brought into line with those from UCCA and PCAS - a possibility from 1988. There are plenty of other areas where one might learn more. The late applications still arriving at PCAS are largely from mature applicants, and the system will have to decide whether the UCCA-style timetable and form-filling has deterred some of them.

Age profile

The late applications may also mean discrimination in effect against mature applicants since popular courses will fill up more quickly. The PCAS is considering research on their mature applicants to find out more about when, where and why they apply. The age profile of PCAS applicants shows that 60 per cent are at least 18 when they apply (suggesting sizeable numbers of applicants from further education colleges or disappointed university applicants taking an extra year) and almost 13 per cent over 20 when they apply.

Nor does the PCAS know other potential effects of the system on the polytechnics whether they have reduced interviews, whether they are making earlier, more or fewer offers, whether their guesses will be right. The PCAS plans an extraordinary set of safety-nets during the September "clearing" process: phones at Cheltenham manned 24 hours a day, seven days a week; up-dated details of vacancies on three different computer networks and in The Sunday Times. So far the polytechnics have made 145,000 decisions on leaving them another almost 300,000 to take. There is still a long way to go.

Subject	applications per place	total applications by December 15
Business & management	28	83,603
Law	23	27,383
Geography	19	10,604
Biological sciences	16	14,116
Civil engineering	11	8,021
Mechanical engineering	11	11,416
Chemistry	9	5,701
Computing (incl maths)	9	19,389
Languages	9	12,833
Accountancy & banking	7	7,907
Architecture & town planning	7	7,079
Economics	7	8,808
Music	7	670
Electrical & electronic engineering	4	7,210
Sociology & other social studies	4	11,859



Lord Young (centre left) and Mr Bryn Nicholson with 11 YTS participants from throughout Britain. Their training ranges from an apprenticeship with Chelsea Football Club to welding and nursing.

Debut for cast of thousands

As the new YTS waits in the wings, Carolyn Dempster previews its performance

A new star made its debut on the education and training stage on January 27. Lord Young, Secretary of State for Employment, hailed it as a world-beater, describing the day as a "turning point in the history of vocational education and training in this country".

Manpower Services Commission chairman Mr Bryn Nicholson billed it as "the best deal young people have ever been offered", and Sir Terence Beckett, director-general of the Confederation of British Industry said his members would do everything in their power to make the "star" a success.

But not all of the players waiting for the new two-year Youth Training Scheme to start on April 1, are convinced that it will be a success. Their anxieties centre on the under-funding of the scheme, the change in cash arrangements which is forcing a cut-back in Mode B provision, the future of inner city training workshops which cannot afford to rely on employer sponsorship, and the speed of implementation of the scheme, which in its current form, is only just beginning to take root and gain acceptance by employers.

In spite of a consensus for the expansion of YTS by the Government, CBI and Trades Union Congress, and the collective commitment of MSC officials, employers and training providers, there is a considerable, and mounting concern that haste, insufficient Treasury finance and an imperfect framework will lay the foundation for a system based more on quantity than quality.

The two-year YTS aims to provide broad-based vocational education and training, and to produce better qualified entrants to the labour market building on the success of the one-year YTS.

All 16-year-old school-leavers will have the chance of two years of training and work experience, and all 17-year-olds one year. Allowances are being increased to £27.50 per week for first year trainees, and £35 for second year trainees. Managing agents, employers, local authorities and voluntary organizations previously operating under the three mode system (Mode A, Mode B1 and Mode B2) will have the opportunity to bid for longer contracts of two years, to be rolled forward annually. Only approved training organizations are to be permitted to operate schemes, in strict accordance with the 10 criteria drawn up to the MSC to promote quality. A Training Standards Advisory Service is to be established to monitor schemes along the lines of HM Inspectors, and, at the end of the day, trainees will emerge with a vocational qualification (yet to be established) which it is hoped will be recognized and accepted by the majority of employers.

Paul Lewis, director of Youthaid, the youth unemployment pressure group, agrees that there are "undoubtedly major improvements" in the two-year YTS, including the rafting of managing agents, proper scheme of qualifications and higher allowance, but he still has severe doubts.

"The main problem with the two-year YTS is that it doesn't create jobs

in any significant sense. The danger in creating such a training scheme at a time of high unemployment is that it will divert the need to create jobs."

As to employer acceptance of a YTS qualification, Paul Lewis stresses that the only way to overcome the problem will be for trainees to demonstrate to employers that their training has been of a high quality. "And can the training be of high quality in view of the price being paid?" he asked.

Exchequer expenditure on the scheme amounts to £925 million in 1986/87 with an additional £1.1 billion in 1987/88 - not much more than that originally budgeted for the one-year YTS.

The perception among the number of training union representatives and voluntary organizations is that the Government is selling vocational education and training "on the cheap". Nowhere is this more keenly felt than among the Mode B providers, who will become "Premium Place" providers under the new scheme. Only 51,000 places have been targeted as premium places for young people regarded as disadvantaged or difficult compared to the 98,000 Mode B1 places available in 1983, and funding is based on the filled place premise. The MSC, through its mixed contract approach, intends that employers should make up the shortfall in funding by paying for premium place trainees.

The National Association for the Care and Resettlement of Offenders - currently operating 43 YTS schemes with some 2,000 trainee places, has no illusions that the cuts in funding and reduction in premium places under the new scheme is liable to place its provision at risk. In November the 429 training staff were issued with redundancy notices, on the understanding that these would be withdrawn once NACRO had negotiated contracts with the MSC's area manpower boards.

As yet they have not concluded any of the negotiations. With two months to go to the launch, a state of uncertainty prevails. "The real danger is that young people in certain areas, such as the inner cities, who need the training most, will not be adequately catered for," said information officer Paul Cavadino.

Experience has shown that employers are unwilling to take on disadvantaged young people who carry the "sticky fingers" tag, and this is unlikely to change with the two-year scheme.

The result would be the loss of much needed expertise and training know-how as providers cut back on staff to maintain some sort of provision. "There is a danger that the scheme will

turn its back on the disadvantaged and come to be universal in application."

Mr George Ruddock, training advisor for Elephant Jobs, a 55-place workshop scheme in south London says that if the organization goes into the two-year scheme, it will necessitate a reduction in staff from 11 to four. "It's also being done too fast for an organization such as ourselves to adjust. It is like being given £1 million on Sunday to spend that day when the shops are shut," he said.

David Truman, training officer with the White Horse Workshop in London's East End was even more scathing about the new scheme. "The whole thing is a mess. The Government expects more and more quality, but isn't prepared to finance it. In order to be viable under the two-year scheme we will have to increase the staff:trainee ratio from 1:5 to 1:25 and our entire *modus operandi* will have to change. We will be forced to become more commercial."

It seemed as if the Government, and the MSC as its agent, were intent on pursuing the "Darwinian" principle that only the fittest should survive.

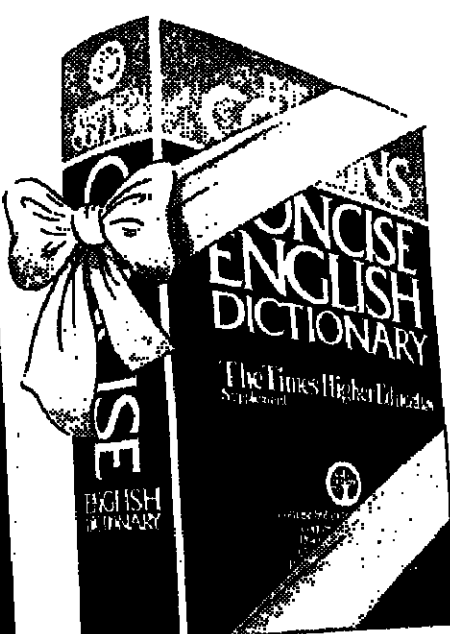
The pace at which the new scheme has been introduced - the framework was outlined in June last year - has also been at the expense of full and thorough consultation, a charge levelled by Malcolm Ryan, chairman of the British Youth Council. Young people were still being viewed as second class citizens, had not been accorded full voting rights and had not played a part in the deliberations. "If the Careers Service, voluntary organizations and youth representatives had been more involved, we wouldn't have some of the problems that are cropping up now," he said.

In its defence, the MSC has set up a series of pilot projects implementing positive discrimination in the non-traditional areas for women, and has announced plans to combat sex-stereotyping in traineeships. Peter Rimmer, secretary of the Youth Training Board acknowledges that the pace has been brisk, but points out that the scheme is not being built from scratch. MSC officials are in a far better position to tackle the two-year YTS than they were with the implementation of the one-year scheme in 1983, and maintains Mode B/Premium providers should be prepared to "knock on doors" to find employers willing to take up disadvantaged trainees.

He also appreciates the concern over the quantity versus quality concept but adds that the two-year scheme has inbuilt quality monitors which did not exist previously.

On the employer side, concerns range from the practical to the cost considerations, depending largely on the size of the firm. CBI deputy director David Stanley states that a number of companies are "fed up" with a change that has been pushed through too fast, and are resistant to the bureaucracy and imposed requirements of the MSC in the form of the criteria set down for ATO status.

"We are making a revolutionary change. It is natural that there should be concern and anxieties," concluded Peter Rimmer.



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(CDBH)

The colleges' last stand

When, in 1975, the colleges and institutes came together in the Standing Conference of Principals and Directors of Colleges and Institutes in Higher Education, the climate was very different from today. A number of quite disparate institutions found themselves in search of a collective identity. For some four or five years the need for mutual self-protection kept them together; but the differing threats they have had to face and their divergent ambitions have weakened their sense of common purpose. The principles which the majority, though by no means the largest and strongest, have advanced to justify their continued existence have been called into question, principles which have now become impossible to maintain when, as a National Advisory Body paper has pointed out, what is at issue now is a reduction in resources and not a "reduction in student demand".

If the colleges are to seize their last chance, it cannot be by the means they have used in the past. The Department of Education and Science will not be diverted from its belief that too many of the colleges "lack the critical academic mass necessary to maintain degree standards"; nor will it exempt institutions from the effective use of scarce resources on the grounds that it is only in small institutions that certain essential values can be preserved. Institutions of modest size, the DES argues, are too vulnerable to changes in national circumstances; the loss of a single course can seriously affect the viability of the whole institution; the loss of relatively few staff can make a disproportionate difference to the strength of its teaching.

The fact that a significant number of the colleges are provided by voluntary bodies means that they cannot expect support from hard pressed local authorities, even though the character and ethos of many maintained colleges differs to no significant extent from those in the voluntary sector. If, then, the DES is not to be moved and the authorities are but cool - as the NAB paper admits, what is faced in the next round of its work has "all the characteristics of hillside forest clearance; difficult, potentially dangerous and needing an axe" - what does the colleges' last chance amount to?

In the first place they must accept that some of their most powerful associates will leave their ranks. The DES is not to be moved and the authorities are but cool - as the NAB paper admits, what is faced in the next round of its work has "all the characteristics of hillside forest clearance; difficult, potentially dangerous and needing an axe" - what does the colleges' last chance amount to?

With time running out for the voluntary sector, John Barnett and John Wyatt offer some pointers to survival

size which will satisfy the criteria of the DES. All depend for their continued existence on the strength of their teacher training programmes both initial and in-service. All colleges involved in teacher training will have to satisfy the view of HM Inspectorate that in relation to primary initial teacher training, in order to provide a group of staff large enough to offer a sufficiently rich and varied educational environment, a minimum group size of around 500 students is needed - and even that size requires some form of association or cooperation with another institution.

So cooperation and association must be the first step; but those words must have a binding quality and not be left to the mercy of rival ambitions and short-sighted survival tactics. The links have to be contractual and permanent. For this reason we rule out links with polytechnics and universities. Such links destroy the idea of a third force. They would also lead in the shortest possible time to the disappearance of the institutions we wish to preserve. The grave stones of the lost colleges in Bristol, Durham, Exeter, London, Newcastle and Norwich bear cold witness to this reality.

We must also rule out links with institutions so different in their nature that association has no real meaning and none of the strictures on non-viable courses is met. If the third sector attempts to replicate what further education colleges mean by non-advanced further education then we shall compete and fail. The colleges must continue with their developing role in higher education and find their distinctive contribution within this.

The nature of the contract must be such that each partner feels that his personal ethos, identity and purpose is preserved. This does not mean that the association can only be of like with like, that voluntary institutions cannot be linked with maintained ones. So long as the articles of the new associations contain such safeguards as already exist in the trusts deeds of some existing institutions, namely that the directorate of the new institution shall preserve and develop the traditions



deriving from the previously separate institutions and the relationship with their different providing bodies, the necessary legal framework can be achieved. The Prime Minister's speech on record that the Government "attaches great value to the work of voluntary colleges in teacher training" and has stated a "firm commitment to the continuation of this work". Where a voluntary college forms part of a new association and has its identity fully safeguarded such a commitment cannot be broken.

We envisage a single directorate for each regional grouping of colleges responsible for the rationalization of courses and negotiating with central authorities both financial and validation affairs. We would, however, entrust to the participating colleges in each grouping the appointment of staff to teach the courses which are their responsibility, the selection and admission of their own students and the conduct of the life of their own institution. The voluntary colleges would probably need to accept that the finance of the new institutions would come on NAB recommendations through local authorities. There will be some groupings of institutions which cross i.e.a. boundaries where one authority will need to be nominated as paymaster.

The new framework of institutions must be sufficient in number and of a sound geographical spread to give a national coverage - this, not only as there shall be wider access for part-time and mature students - but also to increase the involvement of more local communities. The third sector is in a unique position to set in regional groupings, partly because the accidents of the last two years have left a more even distribution of colleges

and partly because they are well used to joint action. Recent inservice developments have increased the colleges' opportunities for working in sub-regional groupings. These institutions will, therefore, be national, regional and local in character in a way that polytechnics and universities can never be. They will have a strong core of initial and inservice teacher training which will of itself hold them close to the communities they serve. This alone, however, will not give them a clear identity.

They must find a distinctiveness; they must establish their own more positive scenario and not "trail forlornly in the wake of their big brother universities and polytechnics". It urges two ways forward. First, the colleges should re-open the possibility of two-year programmes and we would support this view though with some qualification. Where diversification has led some institutions into other vocational and professional areas, a two-year core of studies has not been impossible to devise. The age-old battle between the virtues of concurrent and consecutive patterns of initial teacher training can be reconciled on the basis of a first cycle of two years. The provision, however, must be that this development takes place within the context of higher education. Recruitment to such courses is still difficult to predict.

The suggestion related to adult and community work must again be addressed with more realism and depth. As we have said earlier, it must not replicate what at present goes on successfully in further education colleges. If, however, we interpret our role as service to the local community at our level, then we have a path to pursue. Many colleges are already well on in this field, particularly in the areas of health and public service continuing

education. The traditions of the colleges, whether religious or humanist, provide a motivation for public service. Just as teacher training is conducted in the context of higher education, so a service of education to adult needs is best served by the colleges in the context of higher education. The work the colleges have achieved in diversification should not be thought of as a discarded scrap. Some courses are unique to this sector and others complement and enrich teacher education. What we should envisage is an evolving development of those courses so that they continue to enrich teacher education while adding to regional and sub-regional provision.

What is needed to bring these changes about? First is a realization of the part of the colleges that any other road will lead to their extinction. Will it cost money? On the contrary, it should be significant savings. The rationalization of programmes and the sharing of resources. Are there validly other related problems? Certainly, we are in a different climate from one which froze out the idea of a two-year diploma of higher education. The authors have been deeply involved in the work of the colleges over a quarter of a century. We have seen the growth, the setbacks, the triumphs and the defeats. We are persuaded that the colleges have a right to survive and make a valuable contribution to make. It is not over to the colleges.

The authors are respectively form principal and first chairman of the Standing Conference of Principals and Directors of Colleges and Institutes in Higher Education and Principal of West Sussex Institute of Higher Education.

From its very inception the labour movement has been preoccupied as much with achieving democracy in its internal workings as in society. Arising as it did in rebellion against the narrow monopoly of power and privilege by landed or capitalist interests, the movement has been pervaded by the ethos of equality and accountability. Position and power in the movement is not irresponsible and unbounded. Power is defined, limited and circumscribed. Trades unions and labour parties have struggled persistently and jealously to preserve the powers of the ordinary members against their elected officials and full-time officers.

The very structure of trades unions makes them far more democratic in organization and functioning than any other institutions in British society. Regular branch meetings open to all members, the widespread electoral processes for selecting officials at all levels, annual conferences for policy making and the regular meetings of executive councils between conferences - all these characteristics have their origins in attempts to keep union leaderships in democratic contact with their members and to prevent the abuse of power.

In business, in the public bureaucracies and in the Conservative Party power flows unequivocally and unapologetically from the top. In its aspirations and achievements the trades union movement is a unique and important example of the institutionalization of the principles of equality, fraternity and democracy.

And yet for all its aspirations and achievements the trades union movement is widely attacked for being undemocratic and authoritarian - frequently, one might note by individuals and institutions who would never entertain democratic procedures in the organizations or enterprises which they represent.

Public opinion polls, however, suggest that mass opinion is much more discriminating in its attitudes. About two thirds of adults agree that trades unions are basically a good thing and ensure fair treatment for their members. However, there is also an equally common view that trades union leaders are not representative or in touch with the ordinary members that they nominally represent. For all the ardour of its commitment to democracy the trades union movement has thus failed to convince the general public that its practices live up to its ideals.

Such disenchantment is neither new nor misplaced. Over 70 years ago in his famous study *Political Parties*, Robert Michels penetratingly analysed the gap between the democratic ideals and the oligarchical practices of trades unions and socialist parties. Even their commitment to democracy in internal organization, they tended, he argued, to develop into oligarchies in which small elite groups came to dominate and control the whole organization.

Trades union and socialist party leaders were gradually able to obtain positions of unrivalled power and dominance at the head of their organizations. Most trades union members, he argued, were not particularly skilled at organizational work; they left such dedicated brothers. The leaders, in turn, came to control union finances, the internal administrative machinery and the official means of internal communication.

Internal dissent could often be countered or suppressed through the call for unity - dissent was attacked as treacherous since it undermined the collective unity which was the major source of strength of the trades union in its conflict with the employers. More than any other factor the long and uninterrupted periods of tenure in office by trades union leaders was indicative of their enduring dominance in the internal power structure.

Michels' analysis continues to have relevance in the contemporary era. The wealth of examples selected from the European labour movement, which permeate his book, all have their standing of the functioning of trades union derives from his work. Numerically the trades union movement is the most open and democratic of organizations.

Only handfuls of members regularly turn up at branch meetings. Most other potential attendees are deterred by family commitments and the attractions of leisure. Attendance at branch union meetings comes low in the scale



"GIVING A LEAD"

Norman Bonney describes the background to the crisis which has overtaken trade union democracy

The battle between officers and men

of priorities for the use of after work time for the great majority of members. Union activists are a relatively small and unrepresentative group of members, who exhibit an unusual and unrepresentative group of members, who exhibit an unusual degree of commitment to their organization.

Persistence, endurance and practical organizational skill acquired through years of dedicated commitment are the characteristic features of the union activist. These characteristics are especially significant for the smaller number of activists who successfully embark upon careers for higher level positions in the trades union movement, either as lay or as full-time officials.

The ideology of union activism is based upon fiction and mythology. The culmination of this mythology is the wielding of hundreds of thousands of votes by trades union leaders at national Trades Union Congress and Labour Party conferences. While speaking in the name of millions or hundreds of thousands, the reality is that policies and actions are decided at the most, in even the largest of unions, by thousands.

The potentiality, and to some extent the actuality, is that trades unions are relatively open and democratic compared to most institutions in British society. And yet at every step from the branch level upwards fewer and fewer of the union's membership contribute to the making of policy and decisions, and more and more influence is exercised by individuals.

The position of key national trades union leaders may enable them from time to time to take decisions of great importance on behalf of thousands of their colleagues in the union or the wider movement. Such decisions are not, however, the end of the matter. They are required through the internal democratic procedures of the movement, to be accountable to the delegating organs for their initial instructions.

The mythology of trades union organization assumes that leaders act upon instruction from below and thereafter report upon their actions, and are held accountable to the appropriate lower organs, or otherwise act upon the nationally determined policies of their organization. In many cases, however, mandating instructions do not narrowly circumscribe the actions of delegates or officers. The mandators may not have given full instructions; new and sometimes urgent matters may arise which require immediate decision; report back and accountability procedures may be inadequate and delegates and officers, through their strategic positions, superior skills and

knowledge, may be able to shape the attitudes and perspectives of those ostensibly instructing them.

Despite the considerable advantages which incumbency brings the union officer-holder, as thoroughly analysed and summarized by Michels, their powers do not go unchallenged, nor is it unlimited. Members will not always follow the road designed or shaped by their leaders. Normally quiescent and inactive union members may be stimulated by local crises in the workplace to turn out at mass meetings to overturn the advice of their local or regional leaders, or union leaders may find national policies, such as co-operation with Labour government incomes policies, increasingly and deeply unpopular with local activists and members.

The ultimate sanction of members dissatisfied with the policies of union leaderships, is secession from the union. It is this possibility, argued V.L. Allen in *Power in Trades Unions*, which more than any other factor acts as a discipline to keep trades union leaderships responsive to member interests and concerns. Nothing so much undermines the power of trades union leaders as the loss of members and declining membership revenues.

The question of how trades unions are governed has become a matter of great moment for the whole labour movement and indeed more generally for the future of British society. The 1980 Employment Acts which made available government funded payments for secret ballots of trades union members on industrial action, rule changes and elections for voting members of national executives, has posed a far greater threat to the whole future of the labour movement than any more direct attacks through other measures by this and previous governments.

How can it be that the threat of greater democracy through regular secret membership ballots can constitute such a threat to the labour movement? After all, part of the original purpose of the trade union and labour movement was to argue for the extension of equal democratic rights of citizenship, including the secret ballot in local and national government elections, to all adults.

Regular membership ballots afford a regular and fully open opportunity for all members to participate in the democratic self-government of trades unions. Further, they provide an evidently fair and binding way of taking decisions democratically in a way in which is far superior to the conduct of emergency large scale mass meetings in open air sites, as is frequently required in major industrial disputes.

The rationale of secret membership balloting, as a way of keeping union leadership and policy in touch with membership attitudes has slowly but inevitably won many adherents. The building workers' union UCATT, the white collar ASTMS, electricians' EETPU and engineers' AUEW all now endorse such procedures but the TUC and the largest union of all, the Transport and General Workers' Union, are against the idea. The signs are, however, that more and more unions and the logic of the case may force the two latter bodies to change their policies on this issue.

There is no doubt that the current official attitude of the TUC reflects the views of many, perhaps the majority, of trades union activists. The essential reason for this is that they fear the increased use of such balloting procedures will undermine their power and lead to policies being adopted which they generally do not favour.

The rightward move of the AUEW in the 1970s and 1980s is clearly associated with the regular use of postal balloting. The leadership of the NUM twice failed to get the support of its members for industrial action through ballots, prior to the 1984-85 dispute. Union activists also frequently argue that the extension of membership balloting will give greater power to the mass media to influence the results of trades union elections.

Such arguments underestimate the intelligence and sophistication of the mass membership in whose name the activists claim to speak. Media hostility did not prevent Arthur Scargill getting elected as president for life of the National Union of Mineworkers in 1981 by such a large majority. The long tradition of membership balloting in the NUM didn't in the past prevent the union from successfully and unitedly adopting militant industrial action during the Heath government.

Behind the opposition of many activists to membership balloting is essentially the fear that their power will be diminished, while that of the mass membership is increased. No longer would local branches or national leaderships be able to speak on behalf of thousands or without the latter being afforded an opportunity to express their views.

Key decisions on strikes, closed shops, rule changes or national officials would be made by the mass membership, not union activists. Mass memberships were not excluded from participation or influence in the traditional theory and practice of union organization, but regular membership

balloting would ensure a more systematic, thorough and effective participation than in the haphazard and manipulable processes which have prevailed in the past.

The acute problems confronting the trades union movement over membership ballots, which at present threaten even to split apart the TUC itself, are not going to go away. They are going to become more and more important. Union memberships are gradually becoming more and more educated as educational standards rise and as white collar workers become more and more numerous. Defection respect toward leaderships, which was common in the past, particularly in manual worker unions, is likely to decline. Members are going to expect a greater and greater say in the affairs of their unions.

In time the problem of membership balloting is going to confront the Labour Party with issues equally as severe as those confronting the trades union movement. The rejection by the 1984 Labour Party conference of individual membership ballots as a procedure for selecting parliamentary candidates reflected the activist mentality, protected the oligarchical tendencies of constituency general management committees and deprived the great majority of ordinary Labour Party members in a constituency of the right to participate in selecting their party's candidate. The elite party and trades union cadres who made this decision at the conference display the same distrust of the ordinary member as those activists in trades unions who would deny the members balloting rights.

The new system for selecting the Labour Party leader first operated in 1983 could well on some future occasion when it is necessary to elect a new leader, lead to a constitutional crisis as serious as those confronting the TUC. New leadership elections might not be far off. Electoral defeat, death or ill-health or a challenge for the leadership could occur within a few years.

Theoretically, a leadership challenge could be mounted at the 1986 conference. Whenever such an election arises, and unless action is taken to the contrary, the ground is laid for accusations of manipulation, incompetence or confusion complicating or even nullifying the result. For the incorporation of the trades unions as voting members in the electoral college system means that the very issues of democracy and membership rights posed in this article are brought centrally into the procedures followed in a leadership election.

Consider for instance the problems surrounding the elections to the general secretaryship of the TGWU earlier this year. Accusations of malpractice and incompetence in the conduct of elections in this vast organization of over a million members through the normal methods of union administration led to the trade union having to have a re-run of the election.

The TGWU and other unions then went through processes of internal consultation to determine which candidate their union should support. Such internal procedures can hardly be expected to be neutral soundings of opinion from the branch level upwards when the process is controlled by union officials with their own political values and preferences and when the great majority of members do not regularly attend branch meetings.

In such an important matter as determining how a trades union's votes are to be cast in a Labour Party leadership election such biased and often haphazard processes surely cannot be tolerated. The only actually and observably fair procedure would be an independently conducted membership ballot. Nor would it be acceptable to argue that such matters are internal only to the unions themselves and that other bodies should not concern themselves with them, for in fact what is being discussed here is how the Labour Party selects its leaders, not just how trades unions conduct their affairs.

Democracy is a vital and central value in British society. The trades unions and the labour movement have powerfully and persistently sought to give democracy full meaning and expression in their own movement and in the wider society.

Finding the mechanisms for fuller participation is the major challenge confronting the labour movement if it is to retain and gain public support in the struggle for increased democracy in all walks of life in the coming decades.

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Norman Lindop warns that validation is still a cause for concern

Standards in practice

I have a valid memory of a discussion, at some time in the 1970s with an experienced chairman of a faculty board of studies in one of our largest universities, who was trying to come to terms with the implications of the diversification programmes in colleges affiliated to the university. Although the university had had a long relationship with its colleges, this had hitherto been confined within the field of education and teacher training. Now the problems were coming before the central organs of high scholarship. "How does one actually do it?" Perhaps not surprisingly, that university has virtually ceased to be an external validator; I do not think my friend was unique.

No one can expect to criticize the universities on a question of standards and escape a reprimand. The committee of inquiry into public sector validation dared to say that it felt that the standards exacted by some universities of their associated colleges were not high enough - a rather more critical comment, incidentally, than any we made about validation by the Council for National Academic Awards. The chairman of the Committee of Vice Chancellors and Principals has returned that we had insufficient evidence to sustain the criticism.

At its best university validation can offer what no systems of national validation can hope to offer - close and regular contact between university teachers and college teachers in the day-to-day conduct of the courses: a genuine academic partnership, in fact. In practice, however, there are so many versions of this relationship that one is bound to ask whether all can be equally effective.

The report gives full credit for the virtues of the best kind of university validation, and written evidence we received also testified to this, albeit in somewhat complacent and uncritical terms. The evidence from HM Inspectorate was carefully balanced, not favouring one form of validation against another; it was critical of some institutions under university validation as well as some under the CNAA, but it did comment that in general the processes of university validation were less sophisticated than those of CNAA.

The reservations we had were of a number of kinds. There was the obvious diversity of practice in validation procedures and an inter-institutional relationship from one university to another. While some,

including some of the newcomers to validation, had firm structures of monitoring and approval, others tended to hark back to earlier forms of relationship which placed heavy reliance upon individuals acting as moderators, sometimes with no provision for periodic formal review. Many of these earlier connections were historic in the sense that they went back to the days in which the colleges of education were under the direct tutelage of their universities; no doubt the ties of paternalism have been relaxed but other aspects of the inheritance remain. They relate particularly to the fact that when the colleges came into the purview of the universities they were not attempting to reach degree standards, and were moreover exclusively concerned with education, which as an academic discipline has not been associated in the minds of many members of university senates with the highest academic standards, and which still attracts few of the ablest students. The concept of standards was thus compromised from the start.

We had written and verbal evidence that university teachers actual-

ly involved with affiliated colleges were sometimes unsure what standards to expect of college students, either because the academic subjects they were concerned with were part of an unfamiliar degree package, or because they were genuinely unsure whether the same degree standard should be expected internally and externally. When challenged on this last point some said, "Well, of course, they are college students", significantly implying a lower expectation. This revealing remark may also have reflected the kind of thinking which has made some validating universities reluctant to award degrees of the same nomenclature to those in affiliated colleges - again suggesting different expectations.

When in the mid-1970s the Department of Education and Science tried to mitigate the severity of the run-down in teacher training by ill-advisedly encouraging colleges to diversify on an unrealistically short time scale validation problems were bound to occur. Some of us on the validation inquiry had been involved with CNAA validation at that period. The CNAA boards and committees

had a busy and anxious time trying to help the colleges without compromising minimum standards. There were many rejections. It was well-known at the time that those colleges that "went CNAA" had the roughest ride and some universities encouraged their affiliated institutions to put a new degree courses with the minimum preparation.

It is of course true that since the time there has been a great improvement in the calibre of staff recruited in the public sector, partly because of retrenchment in the universities, many of the dubious courses of a few years ago have no doubt been strengthened and redeemed. It is also true, and of greater significance, that the CNAA example has had a marked effect upon university validation practice, which is now in many ways more rigorous than formerly. There is, however, no set pattern or overall conformity from one university to another and no guarantee that the haphazard behaviour of the past decade would not recur. Hence our proposal for a code of practice for university validators, and some form of national coordination between validating universities, so that the example of the good validators could be spread around.

The author is principal of the British School of Osteopathy.

Pauline Stafford



Skills and spills in a contemporary world

A recent item in *THE THES* reported passages from a speech by Lord Annan in the House of Lords on higher education. In one of them, apparently, he suggested that polytechnics should stop teaching liberal arts courses. Instead they should be teaching "how to write English, how to speak foreign languages, how to sift a thousand pages of complex documents and produce a précis with recommendations for action".

A civil servant's view of higher education no doubt, but difficult to disagree with some of his positive suggestions. In theory, of course, humanities subjects are supposed to teach these things anyway, plus other high level "life skills", for example the ability to develop an argument, the ability to dissect an argument verbally as well as in writing. In practice, as we take students through a chunk of British history or a pile of nineteenth-century novels, these goals may come to take second place, may even be forgotten altogether. We ought to teach and assess spoken performance if we are in the business of fostering marketable skills, but the practical problems of such assessment mean it is often abandoned.

But if we are to justify a curriculum solely in terms of skills such as these, it becomes questionable whether the traditional arts subjects - history, literature, philosophy - and the newer social sciences - political science, sociology - should be taught at all, even in universities. After all, these skills could be taught in the context of degrees whose subject matter also is easy to defend on grounds of relevance and utility - degrees of the business and management type. This way of thinking, of course, is central to the prevailing conception of what should be distinctive about the polytechnics.

The assault on the humanities, and the demand that education should produce immediately and obviously "relevant" knowledge and skills, is symptomatic of a much larger political and cultural trend. Whether this trend is a temporary one, or destined long to endure, is not yet clear. This trend marks the termination of two very

academic fashion, under one guise or another, is technical rationality, which ignores questions of ends, and devotes itself to finding the most efficient means for the realization of ends outside the process of reason. For ends it is believed, are purely private, purely a matter of appetite. Hence when Westland helicopters had to be sold, even the interests of national defence were second to the wishes of the shareholders. To rely upon market forces to allocate resources, burdens and benefits is to abandon the attempt to make a public, political decision about allocation. It is widely doubted

Not all can achieve their private goals simultaneously

whether government has the power to allocate resources successfully; at a deeper level there is a loss of faith in the ability to know and demonstrate what the right allocation would be. We cannot, it is thought, educate people to know and explore ends; therefore we must train them in the efficient deployment of means, so that they can sell their skills to whoever needs them in the pursuit of his or her private goals simultaneously.

I hope that this current trend towards the private determination of ends and the fostering of technical rationality is a passing one. To develop technical rationality alone is to impoverish the Western practice of reason. From Plato to Hegel and beyond there is therefore an alternative conception of reason as normative: the humanities have been concerned with the handling on and development of normative reason. To leave individuals to set their own goals is not, as at first sight it might appear, to make them free; for, obviously, not all can achieve all their private goals simultaneously.

The events of the last few years show that the abandonment of the attempts to establish a common good does not necessarily lead to a diminution of state coercion. Authoritarian regimes are just as likely as "liberal" ones to prefer technical rationality to normative reason. In Poland the Jaruzelski regime is moving against the potentially subversive and critical humanities disciplines, favouring the technical ones, and that for political as much as for economic reasons.

Perhaps, given the failure of both conservative and radical paternalism, our future in the West will be a kind of synthesis of General Jaruzelski and Sir Keith Joseph: the free market will allocate resources, dissent will be diminished as liberal, humanitarian, critical education is scrapped, the remaining malcontents will be subjected to legal repression. My only hope, and it is a dim one, is that we might go the way proposed by such thinkers as Rousseau, G.D.H. Cole, Rawls and Habermas: seeking to establish collective goals in a process of free and equal democratic discussion, democratic procedures running, as Cole proposed, from the highest to the lowest levels of social decision making. In such a world, the humanities and social sciences are relevant and useful, training students in a range of skills which only they can teach: the skills of empathetic understanding and critical discussion of opinions and purposes, one's own and those of others. The business of the liberal arts would be to train not only Lord Annan's civil servants to summarize long documents, but citizens to engage in the democratic establishment of ends. Their demise would make such a world even more of a pipe dream.

The gentleman and the bureaucrat have dragged down the humanities and the social sciences in their fall. They have been replaced by the entrepreneur, paradigmatically a big financier, mythically conceived as a small businessman. And the cultural and

I suspect that student appeals against their assessments are more frequent than they were a few decades ago, paralleling the greater questioning of authority in the academic world and society generally. If so, greater frequency has not led to greater understanding. After 26 years of teaching and several years on a standing appeals committee, I am persuaded that staff as well as students are confused about the proper grounds for mitigation and appeal.

The clearest case for the exercise of discretion by an examining board is when some mishap occurs at the time of the assessments ("I fell down and broke my leg on the way to the examinations"). Here an negotiator award may be proper if the board has enough other evidence of the standard of student's work. In all cases of illness and hardship, the board is not giving an allowance of marks out of sympathy or to compensate for some injury; it is deeming the result to be what it would have been if the mishap had not occurred - if that can be determined. Determining a fair result is more difficult if the upset happened long before the assessments ("I broke my leg six months ago"): certainly the examiners would assume a lesser effect on performance in the final examinations. At some point it must be held that the normal ups and downs of life must be absorbed, without any finessed scale of compensation from the examining board.

The disadvantage of a student's style of life cannot be considered in mitigation of poor results, although it is widely held that this is a valid excuse. Thus, for example, one student claimed recently that she could not study adequately because she lived so far from college and had restricted access to libraries. (*Reductio ad absurdum* would indicate that it would therefore be profitable to study in London and reside in Inverness).

Others expect that some allowance should be made for their responsible for such people to study. But it is not always feasible to provide all the creches needed, nor to restrict the timetable to the hours between 10 and 3, with consequent under-use of buildings, equipment and other resources. If such provision cannot be made, the student is not entitled to claim redress from the examining board should results be poor. The handicap was known before the commitment was made to enter the course, and neither the college nor the student can undertake to remove all the unfairness of life.

Sometimes a student may claim that a fall was caused by absence from the course. While the reason for the absence may be entirely genuine, missing part of the study programme cannot be a valid plea in mitigation. This may seem severe if one is thinking only of a week or two, but the principle

Looking for an excuse

Peter New considers what constitutes proper grounds for appeal

may be seen by *reductio ad absurdum* again. ("I am sorry that I could not attend for the last year of your course but may I have my degree?") There may be course regulations requiring attendance; if so absence is an offence strictly precluding the granting of the award even if assessments are good. In practice a satisfactory result is taken to indicate that any absence has been made good, but a fall cannot be excused by absence: the deficiency is compounded. The examiners may in suitable cases show mercy, not by condoning a fall, but in making special provision (eg by suspending regulations forbidding a repeat year) to allow the student to make up the shortfall in attendance.

Illness as an excuse can be authenticated by a doctor's certificate, although a medical practitioner cannot be expected to gauge the effect on study, and particularly on assessments months or years after the event. Psychological illness is especially difficult for the examiners to evaluate. How far is "strain" or "depression" an expected concomitant of a tough course, how far an illness? Some years ago, when my course was under the aegis of the University of London, a sceptical view was taken of such states of mind. (If performance was affected it was suspected that the symptoms were merely an indication of academic inability).

This stance is too harsh if it can be demonstrated that the cause of the depression is unconnected with the course, but causes of psychological illness are notoriously difficult to discover. Severe cases may be shielded from conditions in which to write their answers, or indeed, alternative forms of assessment. This is right and

proper but one wonders how fair this is on contemporaries who are slightly less troubled, or on those who, equally anxious, make no case for special treatment.

The overseas student often has special handicaps which may be the subject of appeals. While considerable attention has been given to the evils of racial discrimination in education, rather less effort seems expended on the fair assessment of the overseas student. It may appear just that some allowance be given, but on the other hand it can be held that the overseas student studying in Britain must meet British standards in all respects. (This must surely be so if the subject to be assessed is wholly or partially competence in English language.)

In the absence of any instructions from above I follow my own code. I exact no penalty for imperfections in English (wrong tense, no agreement, missing articles) as I would for British students, provided the meaning is clear. If the content is obscure then I cannot assume that the substance of the work would have been better if the expression were clearer. There can be no "benefit of the doubt" or any bias in favour of the overseas student. (This latter would be tantamount to a lower pass level - patronising second grade award.) Assistance to overseas students should be in the form of extra help to enable them to achieve the same standard we expect of everyone.

I am reminded of the wry example of the Chinese student we had many years ago. Her English was poor: colleagues gave extra tutorial help but eventually it was decided that she needed a year's full-time English tuition. Alas! When she came back, with the language problem removed, we found underneath not the bright Chinese student we expected, but a dim one.

As we have seen, confusion over grounds for appeal can arise from the student's perception of his disadvantaged circumstances, and his expectation that compensation for them is forthcoming. Perhaps it is a grey tendency in society to seek *quid pro quo* counterweighting for the unfairness of life. While it is not the *fault of the student*, the continuing dissatisfaction with structure, finance and functions of local government has been reflected in the establishment of at least 15 Royal Commissions or committees of inquiry since 1945.

The crisis is in part an outcome of the country's economic decline. In Whitehall's worry over the great inflation of 1975, the imposition of cash limits in 1976 and the election in 1979 of a government determined to roll back the public sector and public spending. The gathering economic squeeze and the far-reaching central controls on local government have raised profound political and constitutional questions.

From being something of a backwater in political studies local government has become one of the most exciting subjects in the past decade. There have been developments in both empirical research and theory in response to changes in the real world. The Thatcher government has ruthlessly overturned the old system of barter and partnership. Its interventionist and direct controls were not planned before 1979 but have followed from the attempt to control local spending. How ironic that the party's *The Campaign Guide 1983* com-

by Dennis Kavanagh

The Politics of Local Expenditure by K. Newton and T. J. Kuran. Macmillan, £18.00 and £5.95. ISBN 0 333 34425 1 and 34427 8. **Half a Century of Municipal Decline 1935-1985** edited by Martin Loughlin, M. David Gelfand and Ken Young. Allen & Unwin, £17.50 and £6.95. ISBN 0 04 352118 5 and 352120 7. **Between Centre and Locality: the politics of public policy** edited by Stewart Ranson, George Jones and Kieron Walsh. Allen & Unwin, £22.00. ISBN 0 04 352116 9. **The Politics of Local Socialism** by John Gyford. Allen & Unwin, £15.00 and £5.95. ISBN 0 04 352213 0 and 352214 9. **Liverpool on the Brink: one city's struggle against government cuts** by Michael Parkinson. Policy Journals, £22.50 and £9.50. ISBN 0 946967 06 7 and 07 5.

A recurring theme in these books is the idea of crisis to describe the state of local-central government relations. For once the word is not misplaced. The two sides have made claims and counter-claims about legitimacy, rival mandates and constitutionality. Yet for all the lip-service paid by Whitehall and Westminster, the values of local government and democracy have long been vulnerable. After all, the sovereignty of Parliament and Treasury control are a formidable pair of instruments for any central government. The important question in British politics has not been how to check the exercise of dictatorship, but to gain control of it. The continuing dissatisfaction with structure, finance and functions of local government has been reflected in the establishment of at least 15 Royal Commissions or committees of inquiry since 1945.

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When Labour left office in May 1979 morale in local government was at a low ebb because of the contempt shown, for local government by the Labour government.

Yet the traditional party of resistance to Whitehall has proved ruthlessly centralist.

The Politics of Local Expenditure by Newton and Kuran is a brief but devastating book. It puts to the sword much Conservative rhetoric about local government. The data on local expenditure is drawn from the Annual Abstract, Blue Book and other dry sources, but the book is beautifully written and clearly organized. The authors show that, compared to other western states, Britain's 1979 was not high; that local spending was actually lower, and that a modest growth in local spending since then has contrasted with the greater increase in central government spending.

The effectively dismantled the Bacon-Elitis thesis that Britain's economic problems stem from the growth

of the non-market sector and the reduction of the market sector; Britain, in other words, has too few producers. The thesis claims that the public sector and much of local government is a parasite on the productive private and market sector. But Newton and Kuran show that the distinction between the two sectors is too crude to be useful, and that local government provides many market services. The trends in Britain were not much different from those in the other states which had faster rates of economic growth. According to Newton and Kuran costs have risen in local government not because it is labour intensive but because the costs of capital investment (largely land and building in housing and education) have increased faster than inflation. Costs have also risen because local government since 1945 has provided a broader range of services and tried to meet rising expectations about local services from a more affluent society. This is a bold, argumentative book, informed by sympathy for local government and hostility to Whitehall.

Many of these themes are touched on by contributors to *Half a Century of Municipal Decline*. In 1935, *A Century of Municipal Progress 1835-1935* was published to celebrate the centenary of the Municipal Corporations Act. Fifty years later we have in the melancholy successor volume, *Decline*, instead of progress. Both books were written against a background of a central government trying to bring local government to heel. Each chapter deals with a particular policy area, taking as its starting point the relevant comments made thirty years earlier and assessing the extent of decline since. It is invidious to select from the many chapters, but Nicholas Deakin's discussion of social policy stands out for its astute handling of a varied subject matter. It is a mastery of the postwar rise of optimism, belief in social engineering, managerialism, new local planning and then the discrediting of coordinated and rational planning and government intervention. John Stewart writes with authority about the translation of the problems of administration in 1935 to the problems of management today, and the growing willingness of councillors to challenge the organizational and managerial claims of professional officers.

Between Centre and Locality is another multi-authored volume, this time from the Institute of Local Government Studies at Birmingham. It has chapters on various policy areas and problems raised by the squeeze on resources. George Jones of the LSE has it right, I think, when he claims in his conclusion that "partnership" is merely rhetoric for a set of arrangements each side uses to pass the buck to the other. But some of the contributors take a more explicitly political view of developments since 1979 and suggest that they are part of a larger restructuring of relations between state and society. Far from being rolled back the state is actually being strengthened vis-à-vis many other sectors and groups. The institutions of police and education have become part of the strategy of control and regulation. This has been combined with such measures as privatization of local housing and other services, increased controls over local spending and revenue, forcing direct labour organizations into the market place, and enlarging parental choice and information about state schools. A subtle mix of centralization and decentralization, of command and the greater use of markets, has weakened local authority. It is difficult to argue with this line of analysis though I am not convinced that this was intended by the government. Much of the centralization expresses the Thatcher government's growing sense of frustration at how high spending Labour authorities simply carried on spending, and in Liverpool's case, risking bankruptcy.

John Gyford's spirited *The Politics of Local Socialism* explores the rise of the new urban left in the Labour party. He notes that this group has regarded local government as the instrument both for electoral revival and decentralized socialism. Gyford views the development as a response to four

BOOKS

Questions of local democracy



Derek Hatton (Liverpool) and Ted Knight (Lambeth) outside the High Court in January

separate but related features: the plight of inner cities, Labour's electoral collapse, the growing financial constraints imposed on local government, and the ideological crisis of socialism. Of course the advent of Mrs Thatcher has made for a confrontation and since 1979 local government has been the battleground for Labour's resistance to a radical government. I myself am sceptical, however, that the central and local difficulties would have been much different if the Callaghan-Healey regime had continued after 1979. It was a Labour minister who warned local authorities in 1975 that the "party is over". Gyford notes that many of the new left in local Labour parties took the chance provided by the local election disasters. Labour suffered in 1967 and 1968 to replace the old establishment in many local Labour parties.

Gyford reminds us of the long record of tensions in local-central politics, usually over spending, and with the former resisting "economizing" designs of the latter. In the 1930s the *causa belli* was public assistance, in the early 1970s it was housing finance, and in the 1980s local authority rates. This last conflict has resulted in a substantial reordering of relations between the two tiers of government, and the clear subordination of the local to the centre. Derek Hatton - "no cuts in jobs or services" - had a forerunner. In 1921 Poplar's mayor George Lansbury defended his authority's right to overspend thus:

The issue that is raised by Poplar is whether the Labour movement means business. Are we going to attempt to carry out what we say on the platform or are we going to be side-tracked by considerations of "statesmanship"?

The main interest in Gyford's book is his attempt to portray the new left councillors in urban politics. Many of them have been socialized in local community organizations and trade unions, are full-time politicians, and rely on attendance allowances or employment in neighbouring local authorities or public sector trade unions (a "public service" class). In control, they have taken initiatives in establishing units and support groups for gay rights, women's rights, race relations, generally campaigning against "the cuts", and monitoring the local police.

The commitment by this new left to a seemingly endless cycle of political activity, campaigning, and organizing has radicalized Labour and local government. In the Labour party demands for a united front by all local Labour

parties and local authorities against central government have foundered on the traditional autonomy of local parties. Relations between Labour groups of councils and district parties (for example, in Liverpool) have raised constitutional questions. Relations between councillors and professional officers have also been strained as more radical politicians have demanded commitment and sympathy for their policies. Adversarial politics makes life difficult for professionals in local as well as central government. Professionalism and permanence - the twin attributes of British administration - have been succoured by limits on partisanship. They are likely to wither where the boundaries of partisanship are extended. Gyford shows little sympathy with the new breed. He regards the slogan "power to the people" as a cover for activist power. The activists seek not participation but mobilization in support of themselves for they know what the people really want. Mobilization is an exercise in raising political consciousness and educating the people in a style of protest politics and party chauvinism. Politics is only for the dedicated and committed.

The cycle of crisis of urban deprivation, inner city poverty, Labour's decline and central-local tensions have been brought to a dramatic climax in Liverpool since 1983. Michael Parkinson, in *Liverpool on the Brink*, presents dry but awful figures. In 1985 the city had a 25 per cent rate of unemployment, double the national average, and has regularly suffered the highest rate of unemployment in any English conurbation since the 1950s. In the past six years the number of manufacturing jobs in the city has been halved and its population has sunk in the past thirty years from 850,000 to 490,000. It has never recovered from the decline of the port fifty years ago, although the long-term decline has been accelerated in the past decade. According to Parkinson:

It is in the wrong place, based on the wrong kind of economic activity, with an outdated infrastructure, and an underqualified labour force.

Parkinson's book is an "insight" type of study of events leading to the budget crisis (no footnotes, no index, no sources). In the short term, Parkinson blames creative accounting by previous Liberal administrations, government financial policies (in 1979 the government provided 62 per cent of the city's income, by 1983 only 44 per cent), and the failure of the Militant

led Labour council to tackle the financial problems. It is a confrontation politics with a vengeance. The local council clearly used the budget crisis to radicalize the workforce and challenge the authority of government. The fact that local unemployment depends so heavily on public spending and on the local authority made proposals for cuts in local services and jobs political dynamite, not least for the public sector trade unions. Parkinson has clearly talked to most of the central actors. It is a small world of ministers, Militant, the district Labour party, and the district auditor. It ended with the gradual alienation of virtually all parts of the Labour movement and a split in the local trade unions. In a remarkable publishing coup the Policy Press managed to take the story up to October 1985. Yet the book still predates the Stonefront negotiations, and the rescue by the gnomes of Zurich.

It is interesting that all five books are influenced in part by the post-1979 conflict between a Conservative government and Labour controlled authorities. The thinking of both Labour and Conservatives about local government has been based on opportunism and a liking for local compliance with the policies of the centre. What is new is the way Conservatives have been steadily drawn into imposing direct controls over local government in the search for compliance and economy. It is possible to date the turning point in Conservative thinking from a defence of decentralization to protection of the ratepayer and squeezing state spending in the mid-1970s. Before then the values had gone together. The reason may be, as Jim Bulfinch argues elsewhere, that the abiding interest of Conservative leaders in the post-war century has been to preserve the autonomy of central government in matters of "high politics" - for example, foreign and defence matters, and economic policy. Other issues could be delegated to groups or local government. What is distinctive about Mrs Thatcher is that she has expanded the range of political matters which she regards as "high" or important. Extensive intervention in local government (and elsewhere), are part of the strategy of building a strong state.

On the other hand, Labour has never had a coherent view of the state or central/local relations. Central control is defended for economic redistribution, incomes policies and comprehensive education. It is opposed on such matters as industrial relations and Scottish devolution.

Reading these five books leaves me with two thoughts. One is that many students of local government defend local choice and deplore the present uncertainty about structure, finance and purpose and about the responsibilities and accountability of local and central government. There is a recognizable view about local government among most academic students of the subject. They favour local choice and accountability and oppose centralization. I think they are sincere in this, but they also have a vested interest; it makes their subject more interesting. The arguments for local democracy however can no longer be taken for granted. They have to address low election turnout, the facts that only a third of voters actually pay full rates, and that some ratepayers cannot vote, and the clear determination of some hard left councillors to challenge the government (and no doubt, any future Labour government) and the will of Parliament. Liverpool was hardly an advert for local democracy.

The second is to recall that exactly 10 years ago Lord Hailsham spoke eloquently about British government as an "elective dictatorship". By this he meant that formal power was concentrated in the hands of the executive and not countered by any constitutional checks and balances; the sovereignty of Parliament could be used by a party-whipped majority to carry virtually any legislation. He argued that Britain needed a Bill of Rights and a written constitution to curb the dictatorial tendencies of government. Then, of course, Labour was in office, but his warning remains highly pertinent.

Dennis Kavanagh is professor of politics at the University of Nottingham.



The winners and the answers

Despite a host of internal clues - and several visual nudges in David Parkinson's excellent drawing - no great rush of entries for our New Year's quiz. In the event, only two winners, both of them with one error.

First in was Sylvia Qureshi, of Bromsgrove, Worcestershire, then Anne Atkinson, of Abingdon, Ox-

fordshire. The book tokens are, as they say, in the post. For the record A - Edward Heath's autobiographical *Sailing*; B - Frances Trollope's *Domestic Manners of the Americans*; C - the late Philip Larkin's "MCMXIV" from *Whitsun Weddings*; D - the book of the year, the Green Paper; E - an

autobiographical fragment by William Morris; F - Yukio Mishima's *The Sea of Fertility*; G - the opening sentence of George Eliot's *Poetry*; H - A.E. Housman, "1887" from *A Shropshire Lad*; I - Ezra Pound ("E.P." in the poem) in the *Cantos*; finally, J - Emmanuel Le Roy Ladurie's *Montaigne*.

السلامة في العمل

BOOKS

The road to a job

Degrees for Jobs: employer expectations of higher education by Judith Roizen and Mark Jepsen
SRHE and NFER-Nelson, £12.95
ISBN 1 85059 005 2

Degrees for Jobs reports an exciting "survey of employers' behaviour, perceptions and judgements in respect of the higher education system... in the early 1980s" in the United Kingdom. The researchers carried out two hundred interviews, targeted on managing directors, personnel directors and recruiting officers in 138 "employing organizations".

The interviews centred on the "employers' attitudes to and expectations of the higher education system, on the experience employers have of the recruitment of graduates, and on their links with higher education institutions". The firms selected represented regular recruiters of graduates in 14 broad industrial categories. In order to broaden the variety of types of employers included in the study, some additional groups of firms were added to the core sample. These were "non-regular recruiters of graduates" (small firms), large firms that do not take graduates, firms located in the north, recruiters of "professionals" and of "arts" graduates. Roizen and Jepsen present the study's results qualitatively - at least half the text consists of (often fascinating) quotations from interviews chosen to illustrate findings. Their findings make interesting, sometimes surprising and often disturbing reading for academics and those working in higher education policy. While the authors found it difficult to locate universal agreement in the variety of responses given by the

employers, some consensus does emerge. Employers generally felt well-disposed towards the "products" of higher education. Many employers, however, felt that graduates lacked basic communication skills in report writing and working as part of a team, and that many had an understanding of how the "real" business world operates and had often continued to develop an anti-commerce bias whose inoculation had begun in secondary education. Substantial contacts between academic departments and businesses were rare.

Much of what educationists and policy-makers view as essential did not seem of significance to employers. Except where employers were hiring a graduate in order to obtain particular expertise there seemed to be little concern with the details of course content or examination results. "Most employing organizations... attach the highest importance in selecting graduates - or at least, in shortlisting them - to the A level grades they achieved three or four years earlier". For many, the possession of a degree meant little more than that the applicant had been "screened" by the universities and could be assumed to possess a reasonable amount of intellectual ability and self-discipline. Attendance at a more "elite" institution or participation in extra-curricular activities were seen as indicators of the possession of social skills.

Hence, many employers recruited graduates not because they sought the very best employees but rather because the universities provide a well-stocked pool of the sort of applicants the employer wants. The required number of vacancies can be adequately filled there with the least effort. By these criteria, polytechnics, being much less effective "screens" come a poor second. Rather than shortages of graduates in technological or applied business subjects competition for the "best" (in terms of social skills that varied as widely between employers as their needs) strictly vocational skills) figured highly in employers' replies. Based upon the research findings, one could almost be forgiven for advising a bright secondary student that the road to a good job is to work



Students at the Charlotte Mason College of Education which was established at Ambleside in Cumbria in 1892. A history of the college by J. P. Iman has just been published by the Cormorant Press, Winchester at £4.20.

hard only long enough to secure high A levels (with maths) for entry into the best possible university, upon arriving, to work part-time, taking up golf, rugby and bridge and, after graduation, to apply far and wide!

While the recession has forced some to cut back or eliminate recruitment, many employers continue to hire graduates in order to prevent manpower or imbalances in future years. "Less able graduates from higher-status institutions... are relatively advantaged in the recruitment exercise". With recession, employers have had to cut back on the number of institutions

they visit, thereby further lowering the chances of the good student in the lower status institution or less well known department. Sponsorship or "sandwich" courses are seen as a way of giving higher education students the practical exposure to business that they otherwise lack. "The thing that has done most to get bright lads across into engineering is sponsorships." If higher education and business are to forge new and relevant links, this may be an avenue to explore. The variety of opinions expressed by the employing bodies interviewed hampers Roizen and Jepsen's attempts

to draw policy recommendations from the study. Aside from a general feeling that more "numeracy" would be a good thing, they find little approaching unanimity among the employers' opinions. Noting that models and theories or the movement from higher education to employment either require more information from employers than one can expect them to provide (or, in fact, to possess) or are gross oversimplifications of the varied reality found by them, Roizen and Jepsen conclude that rational, fact-based policy judgements cannot be made in this area.

Instead, they argue for policy decisions based on "a high value-fact ratio" safeguarded by being implemented at the institutional rather than the national level. Policy disasters at one educational institution would be cancelled by successes at others. One should note that this reasoning is the rather dubious conclusion that follows, the best policy is to "muddle through" in the best British manner, may have stemmed from the open-ended methods of interviewing and analysis. More directed techniques could well have produced clearer patterns and different (though not necessarily more valid) conclusions and recommendations.

As a lecturer in the "arts" discipline most often cited by the employers as the preferred candidate for a reduction in resources, I would have liked a clearer discrimination between these general comments and those pertaining to graduates from particular subject areas. Little mention was made of the recruitment possibilities of women graduates though this may have been an inadvertent reflection of the attitudes of the interviewed. The study did seem too readily to equate employers' "wants and their needs". Despite these criticisms, the study is very thought-provoking reading for those working in higher education who are at all concerned about the employment prospects of their students. Careers advisers and particularly consider *Degrees for Jobs* essential reading.

Robert L. Miller

Robert L. Miller is lecturer in sociology at Queen's University, Belfast.

Doctorate dilemmas

A New Look at Postgraduate Failure by Ernest Rudd
SRHE and NFER-Nelson, £11.95
ISBN 1 85059 009 5

The recent backlisting of 14 institutions' social science facilities by the Economic and Social Research Council is the first shot in a war designed to improve the completion rates of publicly funded research students. As it is unlikely to be the last policy measure, *A New Look at Postgraduate Failure* is an essential reading for all academics in research degree awarding institutions and for potential students.

Ernest Rudd's approach is to interview failed students. This is the book's weakness as well as its strength because it omits those students and institutions which got the approach right and it allows few comparative statements between good and bad practice. The book has interesting things to say on taught courses, what the failed students gained from their period of research and the important influence of personal problems. This review, however, concentrates on five major issues affecting research student failure which are, to some degree, within the power of institutions to improve: selection, student motivation, research problems, supervision and examination.

It has become almost a truism (*pace* the grant givers' over-reliance on this one indicator) that the class of first degree is a poor guide to eventual research success. Many students with firsts drift into research as the next natural step (a declining problem correlated with the real wage of academics) or are actively recruited by staff with little further examination of their suitability for the totally different task of research. Fitting the student to an appropriate topic appears in many cases of failure to be haphazard or non-existent. Rudd's solution to this problem is to require a pre-entry part-time registration to allow the

student to prepare a full research proposal. This would also act as a selection screen and test, to a limited extent, the student's research potential. Far more attention must be paid to the adequacy of the skills and resources (including time) brought to bear on the research task.

Motivation is recognised as a key problem in research completion. Few problem is treated as given and so no action is taken to improve motivation among research students. This is perhaps the most intractable yet important problem. At its root lies the necessity to create a real research community, with students and staff seen as part of the same team with the same goal of research excellence. Joint facilities (including common rooms), seminars and social occasions are means to this end. The creation of a research ethos in the institution is vital. A system of reward (and punishment) throughout the research period with sub-goals, targets and deadlines must provide a structure within which motivation can flourish. Problems of ploughing a lone furrow can be diffused by peer support. This suggests the need to concentrate research students and the necessity to devote resources to doctoral programmes.

Research problems in the failed group are exacerbated by the "sink or swim" approach adopted by many of their institutions. Is it reasonable to expect a former undergraduate with no research training, work experience, detailed supervision or peer group support to produce a PhD within three years? A research induction course begun on in the first year emerges as the minimum necessity. Rudd suggests that it should be examined. Ongoing inputs of research training, courses and seminars by both faculty and research students themselves are also vitally necessary.

The quality of supervision has long been a source of complaint of research students and reliance on one academic now appears risky and unsatisfactory. Rudd proposes research supervision committees. The Bradford Management Centre solution is a monitoring body of six experienced supervisors, designated doctoral research board tutors, who oversee five or six students outside the tutor's own immediate area

of expertise. Progress is monitored against a research schedule and pre-set targets. This "progress class" targets, given structure to the research period, allows the student to monitor the achievement of the 90 per cent student relationship. Rudd does not allow an adequate treatment of training (or probationary periods) for supervisors, but this is clearly an area of concern.

Fairness in PhD examinations again is a contentious issue. The single external examiner system (with an internal examiner who is often a supervisor with a huge vested interest) creates a lottery if examiners differ in their interpretation of what constitutes a PhD. However, the main cause of failure is non-submission, not exam failure. The current proposals from the Committee of Vice Chancellors and Principals on appeals will go some way to remedy faults in the latter. The call for non-submission is better management of the research process.

In concluding, Rudd proposes a commission to review the structure of research degrees in Britain. His grandiose proposals include better research training, possibly examining attempts to standardize degrees and to hold standards steady (his impression is that overall standards have risen), a proposal to allow part-time work to substitute for the thesis procedures to examine group work and better appeals procedures. Left with the view that the thought of managing research, rather than doing it somehow happens, was alien to many of the failed students' institutions.

Over all, there is much good sense and many practical proposals in this book, but a look at research should be followed by an examination of how to get it right. A complementary volume on best practice techniques would be welcome. Success is not an inevitable image of failure.

P. J. Buckley

P. J. Buckley is professor of managerial economics and chairman of the University of Bradford's ESRC designated doctoral programme in management.

BOOKS

Jewel of physics

QED: the strange story of light and matter by Richard P. Feynman
Princeton University Press, £13.40
ISBN 0 691 08388 6

The foundations of quantum electrodynamics (QED) - that branch of physics concerned with the mutual interaction of photons and electrons - were laid in the great innovative and exploratory period of quantum theory in the late 1920s. It soon became apparent, however, that there was something wrong with QED as it was then understood. When applied crudely, it produced results of the right character to describe experiment, but as soon as people set out to calculate further refinements these additional terms - which should have been small corrections - came out as infinite.

In its original form the theory was nonsense. Indeed, theoretical physicists were for some time impotent to do anything about it; and it was not until the late 1940s that the remedy for these ills was discovered, when it was realised that the universe contains infinities all concentrated in two consequences associated respectively with the mass and electric charge of the electron. The observed values of these quantities included effects due to the electron's interaction with photons; and it was in these effects, and in these alone, that the infinities were located.

It was therefore proposed that the theory should be made finite at a stroke by everywhere replacing the nonsensical infinite values of mass and charge by their finite measured values. That bold step, called renormalization, not only replaced nonsense by sense but it also created a theory which, with truly remarkable accuracy, Feynman points out, that contemporary calculation and measurement agree within residual errors which amount to no more than the equivalent of an uncertainty of the width of a human hair in the distance between Los Angeles and New York.

The renormalization programme and its first successful calculations were carried through independently by three theoretical physicists - the two Americans Julian Schwinger and Tomonaga - whose labours eventually brought them a share in a Nobel prize. Each physicist formulated his calculations in his own particular way. Richard Feynman's method, based on a pictorial technique now called Feynman diagrams, has proved to be a special and lasting source of insight into relativistic quantum field theory. He has always had a strong interest in and in his *QED* lectures, published in this book, he sets out to explain QED - "the jewel of physics - our proudest possession" - to a lay



Richard Feynman

audience. Feynman's technique is a careful and skilful translation of the calculations into words, spoken with a characteristically perky New York accent. However, although nothing that he writes about physics is without much interesting insight, I am doubtful if all of this book will prove as accessible to the layman as he would have hoped. At times - particularly in the account of the scattering of light in

play - details pile up considerably. His account of his well-known *Feynman Lectures on Physics* (intended for an undergraduate audience), some prior acquaintance with the subject is necessary if you are going to benefit from Feynman's idiosyncratic way of putting it. Feynman likes to emphasize the strangeness of quantum theory in a rather "take it or leave it" style. He eschews interpretative questions of a philosophical character, saying that "science and the framework [QED] agrees well with experiment, it is good enough for us". I don't think that is quite good enough. We need not only to know that it works but also to understand it as thoroughly as we can; and it is a pity that Feynman is unwilling to exercise his profound insight on such questions.

QED does not prove quite enough for the four lectures required and the book ends with a quick and surprising-idea account of contemporary physics like.

John Polkinghorne

John Polkinghorne is honorary professor of theoretical physics in the University of Kent, and Vice-Chancellor. His book *The Quantum World* has just been published in paperback by Penguin.

Memories of Clare

Cambridge and Clare by Harry Godwin
Cambridge University Press, £19.50
ISBN 0 521 30765 1

"In plain memoriam Elizabetha de Clare." The words are pronounced over the loving cup as it passes round the table at the annual commemoration of benefactors in Clare College, Cambridge. For 600 years this college, and others like it, have been supported by intense loyalty and affection. One theme of *Cambridge and Clare* is a moving affirmation of gratitude from one of Clare's most distinguished fellows: Sir Harry Godwin. But it is much more than that; it is a vivid record of the changes that have transformed Cambridge and its colleges since the end of World War II, from the legendary closed communities that survived from the 19th century to the open and informal societies that most colleges have now become.

The way to understand the life-style of a Cambridge college is to recollect that it is a secular adaptation of monasticism that has only recently shed most of its privileges and its rigours. Until the late 19th century, fellows had to be celibate. They lived there were only about a dozen of them in a tight community, dining together each night and meeting regularly to conduct the affairs of the college. One fellow acted as tutor, another as bursar, another as steward, another looked after the garden, another presided over the services in chapel. As for the students (it is



Sir Harry Godwin

significant that they are officially "junior members"), there were of course poor scholars who came with scholarships or the support of private patrons, but the life-style was set by the more affluent students, many of them with a ready-made loyalty, because they were the sons and grandsons of benefactors.

Life in college was a combination of ease and asceticism. The "young gentlemen" were waited upon by servants: breakfast brought to their rooms each morning and a fire lit for them; purchases in the town delivered by messenger-boy, for it was *hyla dig* for a student to carry his own parcels; lunch, even out in lodgings, could be ordered from the college kitchen and would be delivered by a porter carrying "in large deep-dish trays, insulated by heavy black cloths." It was compulsory for students to dine in hall six nights a week, on hard benches at heavy oak

Eric Ashby

Lord Ashby is a fellow of Clare College, Cambridge.

is a useful catalogue of the events, people and products of this extraordinarily successful department; an idea of what students as well as faculty members were working on at various times; and a chronicle of administrative changes. But a number of characteristics makes this more of an insider's book than it needs to be. Technologies which could have been explained without too much additional effort are obscured by jargon.

Most irksome, however, is the chronology at the end, in which undergraduate events and trivialities of pop culture are paired with grand historical events - for example, the beginning of the First World War - and monumental feats of the department, such as when Whistler I, the first high-capacity, high-speed, reliable computer came on-line. That such things trivialize is one disappointment, but the authors have missed an opportunity to explain more fully what was happening.

Jonathan Liebenau

Jonathan Liebenau is in the Business History Unit and teaches economic history and systems analysis at the London School of Economics.

Socialist Register 1985/86

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BOOKS

EUROPEAN STUDIES

Forgotten gentlemen

Portraits of Early Russian Liberals: a study of the thought of T. N. Granovsky, V. P. Botkin, P. V. Annenkov, A. V. Druzhinin and K. D. Kavelin
by Derek Offord
Cambridge University Press, £25.00
ISBN 0 521 30550 0

The victors in any revolution presumably have little time for their defeated opponents, even those whom they cannot actually put to death. Ideologically all five of these "early Russian liberals" have suffered the equivalent of death in terms of Soviet priorities. They have occupied footnotes in histories and have even on occasion received the grudging accolade of a learned article, but for the greater part their works have remained unprinted and unread and their reputations have perished. Dr Derek Offord of the Department of Russian at the University of Bristol has noted this, as he calls it, "large lacuna" in our present knowledge of intellectual life in mid-19th-century Russia and has set about rectifying it. He has done so with skill, elegance and good judgement and has consequently made an outstanding contribution to Russian intellectual history.

"Liberalism" is one of those terms which can readily enough be understood in a context of English political history. In 19th-century Russia its meaning suggested a vague combination of pro-western attitudes, gradualist reformism, individualism, a readiness to tolerate opposed views, a generalized belief in the virtues of free trade and a not very assured conviction that the enlightened "liberals" might contribute positively to the betterment of society. No doctrinal political views accompanied this combination of pious hopes, nor was there any attempt to achieve any kind of political organization. Without any forum for such things, liberalism achieved no real political status in Russia until after



A view of Vienna from 1821, showing the Karlskirche and the Polytechnic School, with the River Wien in the foreground. The picture is taken from Schubert and his Vienna by Charles Osborne (Weidenfeld & Nicholson, £14.95).

1905. Consequently, the description "early Russian liberals" when applied to the five personalities portrayed here must be regarded simply as convenient labelling. Each of them made a valuable individual contribution to that protracted civilizing process which involved all the best Russian minds of the last century, but collectively, or in terms of group influence, they can hardly be said to have played a major role. Historians, literary critics, memoirists, they were not original creative artists, nor were they original thinkers, strictly speaking. They were amiable, cultured personalities, notably Anglophile in bias and sober in their views, and like the 19th-century English gentleman they went out of fashion along with the top hat and the brougham.

Granovsky's advocacy of respect for law as one of the guarantees of personal liberty led him also to respect, in a paradoxical spirit, the uniformity of history, like Charlemagne and Peter the Great. His interest in the role of Christianity in western European civilization made him both a supporter of the ideal of chivalry and a man of chivalrous personal standards which brought him into conflict with the often immoderate views and standards of such famous contemporaries as Belinsky and Herzen. The most tragic disservice to his memory was probably done by Dostoevsky in the clownish portrayal of him as Stepan Trofimovich in *The Possessed*. Botkin and Annenkov, influential members though they were of literary circles,

have less claim to our attention than does Druzhinin, given a most sympathetic and balanced rehabilitation here by Dr Offord. His literary criticism was valuable not only for its lack of a social dimension but also for its dispassionate manner, politically conservative though it may have been, and its readiness to acknowledge the priority of aesthetic values.

Kavelin was probably the reputation of his time, the most representative Russian western-orientated liberal thinker of his time. His so-called clan theory of Russian history which emphasized the role of kinship in early Russian society was a product of his belief that Russians were essentially a European people, but the central ideal of his thinking, the concern with the principle of personality and individual liberty, became compromised and almost forfeited by his insistence (shared by other Russian liberals) upon the need for strong government and maintenance of the status quo.

In a thoughtful and perceptive conclusion, Dr Offord provides an admirable summary of the liberal dilemma faced by all five men and, without suggesting precisely where each may have failed, indicates that theirs may be best considered as a tragedy of late arrival on the European liberal scene at a moment when more radical, socialist forces were ready to challenge and defeat them.

Richard Freeborn

Richard Freeborn is professor of Russian language and literature at the School of Slavonic and East European Studies, University of London.

Arms control

The Decision to Disarm Germany: British policy towards postwar German disarmament, 1914-1919
by Lorna S. Jaffe
Allen & Unwin, £20.00
ISBN 004 943034 3

Kaiser Bill's shade must surely be chortling with satisfaction as academic historians now appear to be queuing up to endorse his judgement that British statesmen of his era were no better than noodles who rarely had a lucid interval. Earlier this year Dr Keith Wilson published *The Policy of the Entente* in which he sought to establish that the British foreign-policy-making elite had pursued the appeasement of Russia to such an absurd extent that they were willing in 1914 to engage in an all-out war with a Germany they believed to be essentially benign. Now Lorna S. Jaffe has produced a study (based on her Yale University doctoral dissertation) suggesting that British policy towards Germany was as myopic and perverse at the end no less than at the beginning of the First World War.

Dr Jaffe focuses on a hitherto-neglected feature of British policy, that relating to enforced German disarmament. Her thesis is that David Lloyd George and his colleagues, after much vacillation, settled for an approach based on little more than wishful thinking. The idea of subjecting postwar Germany to permanent limitations on its armaments and armed forces was not something to which the British government gave serious attention during the course of the war itself. On the contrary, most British policy-makers seem to have assumed that a strong postwar Germany was unavoidable. And, according to Dr Jaffe, some in Whitehall during the last year of the war were even "considering the possibility of strengthening the German army as a bulwark against Bolshevism".

An apparent reversal in policy occurred, however, during the immediate pre-Armistice deliberations when British leaders demanded unilateral measures of German disarmament as a precondition for agreeing to an armistice. But Dr Jaffe believes that at this stage "their goal was not to destroy Germany's long-term military potential but to deprive the German army of its immediate fighting capacity".

Only during the Paris Peace Conference of 1919 did the British emerge as in effect advocates of a Carthaginian approach to the matter of German

disarmament. And they were indeed to be decisive in determining the precise form of the relevant terms presented to Berlin. In particular, it was at British insistence that Germany's army was limited to 100,000 long-term volunteers. These measures ending conscription in Germany, according to Dr Jaffe, "contributed to the very revival of militarism which they were intended to prevent".

Ironically, the British, as is well known, were opposed to a Carthaginian approach on most other matters and hence they ensured that they and the French eventually got the worst of all worlds. Above all, Lloyd George was able, in cooperation with the Americans, to frustrate French plans for creating a separate state in the Rhineland. Thus Germany was eventually destined to return to the ranks of the great powers. But when it did so was inevitably as an embittered adversary obsessed by the humiliation represented by the discriminatory aspects of the Versailles Treaty (among which the disarmament clauses were particularly resented).

Dr Jaffe's unflattering explanation of this fatal inconsistency in British policy which the approach to German disarmament in 1919 represented is that Lloyd George saw the issue primarily in terms of domestic British considerations. One of these arose from pledges made during the General Election of December 1918, to end British conscription.

Lloyd George seems to have believed that a logical corollary was to seek to impose a similar policy on Germany - even though he knew that France would undoubtedly retain conscription. But even more important was the untimely emergence of a woolly idealism in a powerful section of the imperial war cabinet. This idealism took the form of expecting that general disarmament would rapidly follow the war to end wars. Lloyd George apparently decided to appease this constituency in his conduct in the Paris Peace Conference by arguing that measures of enforced unilateral German disarmament would be merely a prelude to a universal development.

Dr Jaffe's concluding sentence comes as no surprise: "British policy-makers' failure to examine assumptions upon which they based their policy led them to pursue a course of action which undermined the European stability and peace which they were determined to preserve".

David Carlton

David Carlton is senior lecturer in international history at the Open University.

they were products of late 19th-century liberalism, which their parents combined with an unequivocal Hungarian nationalism. In an age of growing antisemitism and intransigent conservative nationalism neither the Lukács nor the Balázs nor the Mannheim of their parents could serve as adequate moral and intellectual guidelines for the younger generation. Socially placed as they were, the members of the Sunday Circle were particularly vulnerable to marginalization and social dislocation; and in retrospect, it is their social marginality, Gluck argues, in a nation itself on the margins of European culture, which looks to be the determining influence in the choice of their later cultural and intellectual paths.

According to Gluck, one consequence of this marginality was the general interest taken by nearly all the members of the group in aesthetic modernism. The sort of cultural radicalism implied by modernism was congenial to them precisely because it represented the idea of an "inner revolution" which stood apart from and beyond external power relationships in the social and political world. It is no accident, then, that the together with solitude and isolation religious language of salvation and redemption should play, despite their atheism, so large a part in the writings of the Sunday Circle. Somewhat later, Karl Mannheim would reverse the implications of marginality in his famous concept of the "free-floating, unattached intellectual" where social dislocation suddenly becomes a condition for objectivity and insight into society and history.

While Gluck's study would have been much improved by providing the

concept of marginality with a close analysis, none the less it is an intriguing story she tells. Artfully weaving narrative and critical analysis, she reveals both the psychological reality and the ideological contours of the Sunday Circle's world. In her two concluding chapters she traces first the group's retreat from aestheticism, art for art's sake, which was most vivid in their eventual rejection of impressionism; and then the attempt, represented by Lukács's unfinished "Heidelberg Philosophy of Art and Aesthetics", to build a new metaphysics. What Lukács was attempting there, and what the group was searching after, is not captured, however obliquely, by Lukács's own summary of George Santayana's historical position: "He was the Manet of philosophy who has not yet been followed by a Cézanne".

One of the real pleasures of Gluck's work is the use she makes of previously unavailable documents, and in particular her numerous quotations from Balázs's diaries. It is one of these chapters, commenting on the outbreak of the First World War, which best explains not only Lukács's initial enthusiasm for the war, but also the cultural moment Gluck calls "the Sunday Circle". "How will it come, when many years from now, someone reading this diary will suddenly come across in it: 'We are at war.' How is it possible that there have never been any mention of war in these pages, of the society and people living around me? Was it simply frivolity or fate?"

J. M. Bernstein

Dr Bernstein is lecturer in philosophy at the University of Essex.

BOOKS

EUROPEAN STUDIES

Exchange of views

Flaubert and Turgenev, a Friendship in Letters: the complete correspondence
edited and translated by Barbara Beaumont
Athlone Press, £18.00
ISBN 0485 11277 9

Flaubert's friendship with Turgenev lasted from 1863 to the end of his life in 1880. Over those 17 years, which saw the writing of *L'Education sentimentale*, *Trois Contes*, *La Tentation de Saint-Antoine* and *Bouvard et Pecuchet* the two novelists exchanged some 240 items of correspondence, all of which have been previously published in various places, but which are brought together here for the first time.

By far the largest number of the items are short notes to arrange meetings, to beg for a rendezvous or, more characteristically from the elusive Turgenev, to apologise for a change of travel plans. Such notes harp on the habitual themes of two middle-aged misanthropes - gout, the weather, sedentary life, money worries, the idiosyncrasies of politics, and "Other People" - and the usual niceties of distant marks of esteem - thank-you letters for boxes of salmon and caviar,



Flaubert

Rankean history

A History of Europe 1648-1948: the arrival, the rise, the fall
by Paul Dukes
Macmillan, £30.00 and £8.95
ISBN 0333 28104 7 and 28207 8

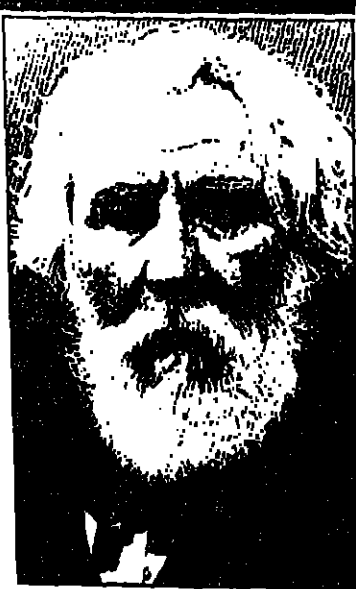
One casualty of the growing specialization of academic history has been the past. The confident, didactic volumes which once surveyed developments since the Renaissance or even the fall of the Roman Empire have become very rare. In recent years only Eugen Suchanek's *History of Europe* and most surveys of European history now cover a century at most. The first thing to say about Paul Dukes's introduction to Europe's last three centuries is that, rather like Hitler's dog "walking on his hind legs", the surprising thing is that it is done at all. In fact it is done remarkably well. Dr Dukes has an established reputation as the author of a scholarly and successful textbook and has with considerable professional skill and skill. Written in a lively if occasionally informal style, his clear, well-paced narrative will be invaluable for students approaching the period for the first time.

Dr Dukes's own expertise is in Russian history and this is one particular strength of his book. For the first

time developments in Russia are given adequate attention and their importance for the rest of the continent is also demonstrated. Equally laudable is his Atlantic perspective: America's central importance for European history during the last two centuries is made clear. Indeed, his central theme is the ways in which the rivalries of the great powers have given way during the 20th century to the dominance of the two superpowers.

This is a survey of international relations and domestic political developments. Attention is concentrated on the major states: Britain, France, Germany, Russia and the USA. Dr Dukes is in the Rankean tradition, believing that Europe's history is the history of the great powers: there is little, as the author frankly admits, on internal, cultural, social or economic developments. The book's overall framework is familiar and conventional. Europe's hegemony was essentially political. It was prepared by developments before 1789, established in the 19th century and lost in the 20th, particularly after 1945.

In one sense Dr Dukes has been remarkably unwise in his timing. His book has been published just as Dr Robert's television series on the *Triumph of the West* has mounted an important challenge to this view of Europe's rise and particularly its fall. A broader approach, which saw European influence in less exclusive political terms, might have led Dr Dukes to take a more optimistic view of developments since 1914. It might also have led him to explore the economic and cultural dominance which the continent came to exercise over the



Turgenev

From this point on references to Zola become frequent and awkward; Flaubert's distaste is mixed with envy and contempt, Turgenev's distance is mixed with acknowledgment of the younger novelist's power, in Russia especially. But these are not firmly fixed attitudes: Turgenev finds *Nana* "perfectly boring... insipid portrait", whereas Flaubert thinks the Russian is "a bit hard on it. There are some fine things, superb cries of passion..."

Barbara Beaumont's edition of these letters would have no doubt had a wider public had it appeared in French. Since it appears in translation, some of the expected scholarly apparatus (such as indications of the location of the MSS and previous publications of each of the letters) has been dropped, and the elucidatory notes are not particularly extensive. It is also unfortunately marred by numerous misprints. But the greatest failing of this book is not just to offer dull and jagged translations of lively originals, but to fail to inform the English reader (except by way of an entirely unhelpful acknowledgment in the preface) that no fewer than eleven of Flaubert's longer and more interesting letters to Turgenev as well as two of Turgenev's replies, have already been rendered masterfully into fluent and colourful English by Francis Steegmüller, in *The Letters of Gustave Flaubert 1857-1880* (1982). The non-specialist would do better to read Steegmüller; the specialist will have access to the originals when the next volume of the Pléiade edition of Flaubert's correspondence appears.

David Bellos

David Bellos has recently been appointed professor of French at the University of Manchester.

David Bellos

David Bellos has recently been appointed professor of French at the University of Manchester.

rest of the world.

Dr Dukes's narrative will be valued principally for its clarity, remarkable comprehensiveness and unflinching good sense. It is stronger on events than on ideas; the sections on liberalism, socialism and nationalism are rather perfunctory. In what is a relatively long book, some attention might have been given to the contrasting views of historians and to the debates between them: the reader of the sections on the origins of the First World War, for example, would not be aware that this had been the subject of lively controversy, and the whole book has a somewhat bland tone. The unrelenting narrative has the effect of squeezing out much in the way of extended analysis or considered explanation. Any survey which ranges so widely inevitably will contain a fair number of debatable judgements and outright errors, but here these threaten to reach unacceptable proportions. Some of the mistakes are startling, notably the confusion on page 408 between the purge of the storm troopers in the "Night of the Long Knives" (June 1934) and the massacre of Jews on Kristallnacht (November 1938). But such errors can be corrected in the future editions which this book will require.

Despite some drawbacks, then, Dr Dukes's survey will have a long and honourable life. It provides a valuable, though distinctly traditional, introduction to more sophisticated studies.

H. M. Scott

Dr Scott is lecturer in modern history at the University of St Andrews.

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DIRECTOR

The Institute's present Director, Professor M.L.O. Fabor, will complete his term of office in March 1987. Applications are invited from persons of international standing in the field of development studies to succeed Professor Fabor from 1st April 1987. The Institute would also be interested to hear from persons wishing to suggest the names of potential candidates for this appointment.

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Further particulars are available from the Academic Secretary, Institute of Development Studies, University of Sussex, Brighton, Sussex BN1 9RE (telephone number 0273-878276). All enquiries will be treated in strict confidence. Applications should be sent to arrive by 14 March 1986. (74262)

UNIVERSITY COLLEGE
OF THE NORTHERN TERRITORY
Australia

The Government of the Northern Territory has recently passed legislation to form the University College of the Northern Territory, which is expected in due course to achieve full status as a university. Situated in Darwin the College will base its undergraduate curriculum on that of the University of Queensland, whose degrees will be awarded to successful candidates.

The foundation of the University College of the Northern Territory provides opportunities for research in an area which has been relatively inaccessible from University centres until now. It is anticipated that there will be significant research opportunities available in collaboration with University of Queensland staff as well as staff members in research institutions within the Northern Territory.

The Northern Territory is rich in anthropological and archaeological material; its history is largely unexplored; it has the fascination of a government system in transition from centralised bureaucratic control to statehood; Mining is one of the important industries in the Territory, yet the geology is relatively unknown. Except for its larger elements the fauna have been little studied; Darwin's site on the edge of the Arafura Sea offers an unprecedented opportunity for studies in tropical marine science; much of the fauna remains undescribed. Dry sclerophyll and rain forest, rivers and swamps, mangrove sands and coral reefs provide a multitude of habitats to study. Darwin's proximity to South East Asia offers significant opportunity for research into regional science and tourism.

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(74277)

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VICE-CHANCELLOR

The University of East Anglia is seeking a successor as Vice-Chancellor to Professor M.W. Thompson, who becomes Vice-Chancellor of the University of Birmingham in January 1987.

Persons interested in being considered for this post, or wishing to suggest any names for consideration, are invited to write in confidence to the Chairman of the Joint Committee of the Council and the Senate established to recommend an appointment, Colonel G.S.H. Dicker CBE, Pro-Chancellor, c/o the Registrar and Secretary, University of East Anglia, Norwich NR4 7TJ, if possible by the end of February 1986.

The Committee hopes to receive applications from persons with a wide variety of backgrounds and experience for this post of chief academic and administrative officer of the post and the University may be obtained from the Registrar and Secretary.

University of Liverpool
Department of Civil Engineering

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Universities continued



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Shrivenham

Lecturer/Senior Lecturer

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The successful candidate will be expected to teach at all levels including specialist and MSc courses and to make full use of and further develop the existing image processing laboratory currently based around an Intellect 100 system.

There are outstanding opportunities for a dynamic applicant to exploit the excellent existing facilities for research, development and consultancy within the School.

Salary will be according to qualifications and experience in the Lecturer range £7,820-£15,520 or Senior Lecturer range £14,700-£18,415 p.a.

Application forms and further particulars are available from the Personnel Office (HO), RMCS Shrivenham, Swindon, Wiltshire SN6 8LA. Tel: (0793) 782651 Ext 2403/2421 quoting Ref. SEES 2/86. Closing date for applications: 27th February 1986. (74287)

UNIVERSITY OF ZIMBABWE

Applications are invited for the following posts:

LECTURESHIP/SENIOR LECTURESHIP/ASSOCIATE PROFESSORSHIP:

DEPARTMENT OF BIOLOGICAL SCIENCES (3 posts)

Nematology/Entomology/Veterinary/Range Land Ecology

Applications are invited for vacant posts which will be filled from THREE of the following disciplines. In all cases the successful applicant should possess:

(a) a PhD or equivalent research experience. The Department as well as specialist MSc programmes. The Department is well equipped for research in the above disciplines. Applicants will be expected to supervise students for MPhil/PhD degree in their subject.

(b) a postgraduate degree in their subject.

(c) a postgraduate degree in their subject.

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Universities continued

UMIST
Department of ComputingFIVE
ALVY-FUNDED
RESEARCH
ASSISTANTS

The Information Systems group within the Department for research in information systems, is seeking five research assistants to work on a variety of projects. The projects will be carried out in the following areas: (i) data processing, (ii) data communication, (iii) data storage, (iv) data retrieval, and (v) data analysis. The successful candidates will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Computing, UMIST, Oxford Road, Manchester M6 6PU.

Candidates should have research or industrial experience in one or more of the following areas: (i) data processing, (ii) data communication, (iii) data storage, (iv) data retrieval, and (v) data analysis. The successful candidates will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Computing, UMIST, Oxford Road, Manchester M6 6PU.

The post will be for 3 years with the salary of £7,357 - £12,125 per annum. Applications should be sent to the Department of Computing, UMIST, Oxford Road, Manchester M6 6PU.

University of
Botswana
LECTURERS

Department of Physics
(Three posts)

Applicants should have at least an M.Sc. or equivalent in Physics. The Department is interested in the following areas: (i) Experimental Physics, (ii) Theoretical Physics, (iii) Atomic and Molecular Physics, (iv) Solid State Physics, and (v) Nuclear Physics. The successful candidates will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Physics, University of Botswana, Gaborone, Botswana.

Salary scale: P.084 - P.132. Applications should be sent to the Department of Physics, University of Botswana, Gaborone, Botswana.

Applicants with names and addresses of referees should be sent to the Department of Physics, University of Botswana, Gaborone, Botswana.

The Flinders
University
South Australia
CHAIR
OF MODERN GREEK

Applications are invited for appointment to the Foundation Chair of Modern Greek in the School of Humanities. The Professor will be head of the new Discipline of Modern Greek and will be expected to provide leadership, both in teaching and research.

There is a substantial Greek community in Adelaide which supports the establishment of the Discipline of Modern Greek and looks to it to play a leading role in preserving aspects of their culture and assisting them to pass them on to succeeding generations. In order to achieve this objective, the Chair of Modern Greek will be expected to participate in such off-campus activities as may be approved from time to time by the University Council as part of any co-operative arrangements with the Greek community in South Australia.

Salary: A\$7,036 a year.

Enquiries of an academic nature may be addressed to the Chairman of the Discipline of Modern Greek, The Flinders University of South Australia, Bedford Park, South Australia 5042. Applications should be sent to the Department of Modern Greek, The Flinders University of South Australia, Bedford Park, South Australia 5042.

University College of
North Wales
Colog Prifysgol
Gogledd Cymru
BangorNATWEST LECTURER
IN BANKING AND
FINANCE

Applications are invited for the above new post. The person appointed will be expected to have a degree in Banking or Finance, and to have a minimum of five years' experience in the field. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Economics, University College of North Wales, Colog Prifysgol, Gogledd Cymru, Bangor.

The post will be for 3 years with the salary of £7,357 - £12,125 per annum. Applications should be sent to the Department of Economics, University College of North Wales, Colog Prifysgol, Gogledd Cymru, Bangor.

Applicants should have a degree in Banking or Finance, and to have a minimum of five years' experience in the field. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Economics, University College of North Wales, Colog Prifysgol, Gogledd Cymru, Bangor.

The Australian
National UniversityPOSTDOCTORAL
FELLOWSHIP
IN THERMODYNAMIC
STUDIES OF
SHEET-SILICATE
MINERALS
IN GEOTHERMAL
AND
HYDROTHERMAL
SYSTEMS

The successful applicant will be involved in a number of projects in the field of thermodynamic studies of sheet-silicate minerals in geothermal and hydrothermal systems. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Geology, Australian National University, Canberra, Australia.

Salary scale: P.084 - P.132. Applications should be sent to the Department of Geology, Australian National University, Canberra, Australia.

Applicants with names and addresses of referees should be sent to the Department of Geology, Australian National University, Canberra, Australia.

University of
Nottingham
Department of MusicTEMPORARY
LECTURESHIP

Applications are invited for a temporary two-year fixed term Lectureship in the Department of Music. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Music, University of Nottingham, Nottingham, England.

Salary: £7,500 a year.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Music, University of Nottingham, Nottingham, England.

University of
Birmingham
Department of Mechanical
EngineeringLECTURESHIP
IN ADVANCED
MANUFACTURING
TECHNOLOGY

Candidates should have a background in the field of Computer Integrated Manufacturing. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Mechanical Engineering, University of Birmingham, Birmingham, England.

The Department has excellent facilities for research in the field of Computer Integrated Manufacturing. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Mechanical Engineering, University of Birmingham, Birmingham, England.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Mechanical Engineering, University of Birmingham, Birmingham, England.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Mechanical Engineering, University of Birmingham, Birmingham, England.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Mechanical Engineering, University of Birmingham, Birmingham, England.

University of
YorkTWO LECTURESHIPS
IN POLITICS
ECONOMICS AND
PHILOSOPHY

The University of York is seeking two Lecturers in the field of Politics, Economics and Philosophy. The successful candidates will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Politics, Economics and Philosophy, University of York, York, England.

Salary scale: P.084 - P.132. Applications should be sent to the Department of Politics, Economics and Philosophy, University of York, York, England.

Applicants with names and addresses of referees should be sent to the Department of Politics, Economics and Philosophy, University of York, York, England.

James Cook University
North QueenslandLECTURER
(SPECIAL
EDUCATION)

Applications are invited for the position of Lecturer (Special Education) in the Department of Education. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Education, James Cook University, North Queensland, Australia.

Salary: £7,500 a year.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Education, James Cook University, North Queensland, Australia.

The University of
New South Wales
Sydney, AustraliaSCHOOL
OF POLITICAL
SCIENCE
LECTURER

Candidates should have a degree in Political Science. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the School of Political Science, The University of New South Wales, Sydney, Australia.

Applicants should have a degree in Political Science. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the School of Political Science, The University of New South Wales, Sydney, Australia.

Applicants should have a degree in Political Science. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the School of Political Science, The University of New South Wales, Sydney, Australia.

Applicants should have a degree in Political Science. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the School of Political Science, The University of New South Wales, Sydney, Australia.

University of
Queensland
AustraliaLECTURER/
SENIOR LECTURER
(TENURE)
CIVIL
ENGINEERING

Must have a degree in Civil Engineering. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Civil Engineering, University of Queensland, Australia.

Applicants should have a degree in Civil Engineering. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Civil Engineering, University of Queensland, Australia.

Applicants should have a degree in Civil Engineering. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Civil Engineering, University of Queensland, Australia.

University of
OxfordTUTORIAL
FELLOWSHIP
IN FRENCH
LANGUAGE AND
LITERATURE

The College proposes to elect, with effect from 1 October 1986, a Tutorial Fellow in French Language and Literature. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of French Language and Literature, University of Oxford, Oxford, England.

Salary scale: P.084 - P.132. Applications should be sent to the Department of French Language and Literature, University of Oxford, Oxford, England.

Applicants with names and addresses of referees should be sent to the Department of French Language and Literature, University of Oxford, Oxford, England.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of French Language and Literature, University of Oxford, Oxford, England.

University of
Stirling
Department of PhilosophyTEMPORARY
LECTURESHIP

Applications are invited from people with an interest in the field of the history of philosophy for a temporary two-year fixed term Lectureship. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Philosophy, University of Stirling, Stirling, Scotland.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Philosophy, University of Stirling, Stirling, Scotland.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Philosophy, University of Stirling, Stirling, Scotland.

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University of
Stirling
Department of Political
StudiesTEMPORARY
LECTURESHIP

Applications are invited for a temporary two-year fixed term Lectureship in the Department of Political Studies. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Political Studies, University of Stirling, Stirling, Scotland.

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University of
Stirling
Department of Political
StudiesTEMPORARY
LECTURESHIP

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Salary: £7,500 a year.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Political Studies, University of Stirling, Stirling, Scotland.

Personal

LOANS TO SALARIED
PERSONS

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University of
Stirling
Department of Political
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University of
Stirling
Department of Political
StudiesTEMPORARY
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Salary: £7,500 a year.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Political Studies, University of Stirling, Stirling, Scotland.

Polytechnics continued

FACULTY OF TECHNOLOGY

Applications are invited from individuals or groups of individuals for the following vacancies: Department of Electrical and Electronic Engineering. Two Professors. One of whom will take on the function of Head of Department of Electrical and Electronic Engineering and responsibility in collaboration with the Department of Communication Engineering for co-ordination of the MEng/BEng programme. The second appointment will have an emphasis on research in this department which is heavily involved in computer related technologies.

Department of Computing and Department of Electrical and Electronic Engineering. Reader, Principal Lecturer, Senior Lecturer/Lecturer II, Research Fellow/Assistant. In subjects relating to computing and intelligent systems (in the Department of Computing), VLSI and CAD (in the Department of Electrical and Electronic Engineering).

Salary ranges: Professor (Head VI): £18,615 to £20,511. PL & Reader: £14,013 to £17,619. LUSL: £8,076 to £15,045. (level of appointment and starting salary dependent upon qualifications and experience). Research Fellow/Assistant: £7,953 to £10,968.

Further particulars and application forms are available from the Personnel Officer, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8AA. Tel: (0752) 264639 in anticipation of a closing date of Friday 28 February 1986. Information on these posts may also be obtained from Prof D E Fussey, Dean of Technology (0752) 264658.

Plymouth
PolytechnicLEEDS POLYTECHNIC
Polytechnic Library

TUTOR LIBRARIAN - LECTURER II (1 YEAR TEMPORARY POST). A vacancy exists for a temporary full-time Tutor Librarian commencing as soon as possible. Duties will involve materials selection and organisation and tutorial work on sources of information in a combination of: Electrical/Electronic Engineering, Business Studies, or Computing as appropriate.

Post carries NJC Conditions of Service. Salary scale: £8,076 - £12,945. Details from: Mrs H Cole, Staffing Officer, Leeds Polytechnic, 26 Queen Square, Leeds LS2 8AF. Tel: (0532) 462585. Closing date: 21 February 1986. PLEASE ENCLOSE S.A.E.

University College
Cardiff
Department of Social
SciencesRESEARCH FELLOW
THREE YEAR POST

Applications are invited from people with an interest in the field of the history of philosophy for a temporary two-year fixed term Lectureship. The successful candidate will be required to have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Social Sciences, University College Cardiff, Cardiff, Wales.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Social Sciences, University College Cardiff, Cardiff, Wales.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Social Sciences, University College Cardiff, Cardiff, Wales.

Salary: £7,500 a year.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Social Sciences, University College Cardiff, Cardiff, Wales.

LECTURING APPOINTMENTS IN
THE POLYTECHNIC,
WITH HONORARY CONTRACTS
TO WOLVERHAMPTON HEALTH
AUTHORITY

1. LECTURER IN HEALTH STUDIES (ACUTE NURSING/SENIOR NURSE EDUCATIONAL RESEARCH). 2. LECTURER IN HEALTH STUDIES (DISTRICT NURSING/NURSING OFFICER).

Qualifications: A degree (preferably post-graduate level) in Nursing, or RNT acceptable to ENB for post 2 District Nursing (DN) qualification is essential and desirable. Valuing would be advantageous. Other nursing qualifications would be an advantage.

These newly created posts arise from a desire to foster closer cooperation and collaboration with the Health Authority, and also the need to recruit on the current district nursing and health studies courses, and on the Diploma in Professional Studies in Nursing Course currently being developed.

It is expected that approximately half of the time of those appointed will be spent in carrying out the duties and responsibilities pertaining to the Polytechnic part of the appointment, and half of the time in the Health Authority part of the appointment.

For informal visits and further information contact Mrs Barbara Green, Principal Lecturer (Health Studies), Tel: (0902) 27371.

Further particulars and application forms are available from The Wolverhampton Health Authority, 158, Tel: (0902) 27371.

TEESSIDE POLYTECHNIC
Department of Administration
& Social Studies

LECTURER II/SENIOR LECTURER IN SOCIAL PSYCHOLOGY. Applications are invited from suitably qualified candidates for the above post, available from 1st January, 1986. A good first degree and higher degree are considered necessary qualifications and the successful applicant will be expected to have both teaching and research experience in the field. An interest in counselling and group work would be an advantage.

Interested applicants can receive further information by contacting Jane Hughes on (0462) 218121 Ext. 4344.

Salary: £8,076 - £12,945 (efficiency bar) - £14,048 (max bar) - £15,045 per annum. An appointment will be made at Lecturer II level with a commencing salary no greater than £12,945 per annum.

Application forms and further information may be obtained from the Personnel Office, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland, TS1 3BA. Telephone (0462) 218121 Ext. 4114. Closing date for applications: 14 April, 1986. An Equal Opportunity Employer.

Sunderland
Polytechnic
Faculty of HumanitiesPRINCIPAL
LECTURER
IN ACCOUNTING

Successful candidate will be expected to have academic and practical experience in the field of accounting and to be able to work independently. Applications should be sent to the Department of Accounting, Sunderland Polytechnic, Sunderland, England.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Accounting, Sunderland Polytechnic, Sunderland, England.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Accounting, Sunderland Polytechnic, Sunderland, England.

Salary: £7,500 a year.

Applicants should have a degree in a relevant field and to be able to work independently. Applications should be sent to the Department of Accounting, Sunderland Polytechnic, Sunderland, England.

Colleges and Institutes of Higher
EducationDES/MSC LOCAL COLLABORATIVE
PROJECT: TOURISM

The Department of Education and Science and the Manpower Services Commission have agreed funding for a major new training initiative for the tourism industry. The project is being undertaken jointly by the Dorset Institute and the Hotel and Catering Industry Training Board. This project has three aims:

(i) an analysis of the training needs of the tourist industry; (ii) the production of a series of training packages for each of the main sectors of the tourist industry to meet its needs; (iii) to develop various kinds of delivery mechanisms including open learning systems.

These staff will be employed on a 1 year fixed term contract. The senior research assistant and one of the research assistants will be based at the Dorset Institute and the second research assistant will be based at the Hotel and Catering Industry Training Board.

Applications are requested from suitably qualified persons, preferably with research experience and with an understanding of the tourism industry. It is unlikely that applicants under 25 will be considered for these posts.

For application forms, job descriptions and further particulars please apply to either:

Dr P. Lavery, Head of Department of Tourism & Field Studies, Dorset Institute of Higher Education, Weymouth Road, Weymouth, Dorset BH12 5BB.

Mr P. Baker, Hotel & Catering Industry Training Board, Prudential Building, Wine Street, Bristol BS1 2PH. Closing date 17th February 1986.

Nene College
Northampton

Faculty of Art and Design. Senior Lecturer in 3-Dimensional Design (Course Leader). Applications are invited from suitably qualified and experienced persons for the above appointment. Applicants should be specialists in either display/production design or product design and also have a general understanding of all aspects of 3D disciplines. In addition recent relevant industrial and educational experience is required.

Lecturer II in Photography (Subject Leader). Applicants should be suitably qualified and experienced and be capable of co-ordinating and developing photographic studies within a range of courses including BTEC HND in Graphic Design. Candidates should preferably have relevant industrial and educational experience, and understanding of video and/or computer applications would be an additional recommendation.

The first post is vacant from the beginning of the Summer Term. The second post is vacant from September 1st. Salaries in accordance with the Burnham (FE) Report. Further details and application form may be obtained on receipt of an SAE from The Dean, Faculty of Art and Design, Nene College, St. George's Avenue, Northampton NN2 6JD. Closing date: 21st February, 1986.

COUNTY OF SOUTH GLAMORGAN
SOUTH GLAMORGAN INSTITUTE OF HIGHER EDUCATION (CARDIFF)
FACULTY OF BUSINESS AND LIBERAL STUDIES
DEPARTMENT OF BUSINESS STUDIES AND COMMUNICATIONS

Senior Lecturer - Managerial Finance. POST NO. 81/92. Applications are invited from post graduates and/or professionally qualified personnel with financial management experience. The ability to use computers for financial analysis, data base management and word processing is desirable. Possession of a teaching qualification would be an added advantage.

SALARY - SENIOR LECTURER: £11,868 - £16,045. Further details and application forms may be obtained from the Personnel Office, South Glamorgan Institute of Higher Education, Cyncoed Road, Cardiff CF2 8XD. Telephone: Cardiff (0222) 551111. Completed application forms should be returned within fourteen days of the publication of this advertisement.

Applications are welcomed from suitably qualified people regardless of their sex, marital status, race, religion, colour or disability.

For further details and an application form to be sent to the Personnel Office, South Glamorgan Institute of Higher Education, Cyncoed Road, Cardiff CF2 8XD. Closing date: 21 February 1986. PCL is an equal opportunity employer. (0222) 551111.

PLEASE MENTION
THE T.H.E.S.
WHEN REPLYING
TO ADVERTISEMENTS

Colleges and Institutes of Higher Education continued

SGIHE SOUTH GLAMORGAN COUNTY COUNCIL SOUTH GLAMORGAN INSTITUTE OF HIGHER EDUCATION - CARDIFF

Dean of Faculty of Technology Grade VI

To commence duties on 1 April 1986.
Due to the promotion of the present postholder to a principalship, applications are invited from well qualified and experienced graduates in Engineering.

The Dean's function includes the oversight of a number of departments and responsibility for a main centre within the Institute.

SALARY SCALE: £18,615 - £20,511 p.a.

Further particulars and application forms may be obtained from The Personnel Officer, South Glamorgan Institute of Higher Education, Cyncoed Centre, Cyncoed Road, Cardiff CF2 6XD. Telephone Cardiff (0222) 551111. Completed application forms should be returned by 19 February 1986.

Applications are welcomed from suitably qualified people regardless of their sex, marital status, race, religion, colour or disability. (74267)

Christ Church College of Higher Education Cantorbury

BRITISH FILM INSTITUTE (BFI) LECTURER/IN SENIOR LECTURER EDUCATION

With special reference to the use of television and film in primary schools.

There is a well established department of Media, Film and Television with courses leading to a B.A. in Film and Television Studies. Among the duties of the post holder will be the development of the department and the provision of media education for continuing and service teachers.

The college has over 1,100 students and offers B.A., B.Sc., and B.Ed. degrees, and a wide range of other courses in Education.

SALARY SCALE: Lecturer IV Senior Lecturer £17,956 - £14,763 p.a.

It is intended that the appointment will take effect from the beginning of the autumn term 1986.

For further details write to: Principal, Christ Church College, Canterbury, Kent, to whom applications should be sent not later than 4 March 1986. (90323)

S. Martin's College of Higher Education Lancaster

LECTURER/IN SENIOR LECTURER IN 14-19 EDUCATION

Applications are invited from suitably qualified and experienced graduates to join the existing 14-19 Education team who are involved in current initiatives such as curriculum development, research and evaluation. The post is for 1 September 1986. Applicants should have experience in some of the following fields: CPD, C&G, VET, GCE, Personal and Social Education, Adult Learning, and Learning Styles. Further particulars and application forms may be obtained from The Principal, S. Martin's College, Lancaster, LA1 3JD. Completed application forms should be returned by 21 February 1986. (90323)

The London Centre for Biotechnology Biotechnology

A SHORT COURSE FOR PICKUP LECTURERS

The course will review state-of-the-art in biotechnology and will include substantial "hands on" practical work. The course is offered in the part-time mode (one day per week) from April 18th to June 27th 1986. The course fee is £250.

The London Centre is a DCS-registered Regional Centre for INSET.

Further details from: Dr. D. Cook, Co-ordinator, The London Centre for Biotechnology, 100 South Bank, Polytechnic, Rotherhithe, London SE16 5AA. Tel: 01-924 6989. Fax: 01-924 6989. (90323)

King's College London (KQC) University of London STUDY HISTORY AND PHILOSOPHY OF SCIENCE AT KING'S

One year M.Sc. course taught by Dr. M. J. G. Cantor, D.Phil., and Dr. J. D. G. Cantor, D.Phil. Applications must be made by a first degree in one of the natural sciences or mathematics. All courses are taught by leading experts in the field. Early application is advised since the course is highly competitive for British Academy award is £1,000.

Send for details to: Professor M. J. G. Cantor, Department of Philosophy, King's College London (KQC), Chancery Lane, London WC2A 4AL. Tel: 01-51 2488. (90323)

Seminars

Sixth Form Careers Teachers - a chance to learn

DURHAM 10th - 11th July 1986

British Gas - one of the country's largest industrial organisations. But how much do you really know about our work, or the sponsorship and training schemes we offer to students continuing their education?

Last year we held a seminar, for the first time, especially aimed at careers teachers. It was so well received that we are repeating our efforts this year.

Taking the form of informal talks on the role of British Gas Headquarters, with reference to the whole of the Gas industry, it is designed to give you a clearer understanding of our career opportunities, helping you in your advisory role, and so, hopefully, helping pupils too. You will also be able to visit some of our scholarship trainees and visit a British Gas site, giving you a complete picture of the type of work and conditions our sponsored students can expect to find.

All meals, accommodation and the equivalent of 2nd class rail fare will be borne by British Gas. Delegates will be expected to make a donation of £10.00 towards costs.

If you wish to make any nominations for this course, please send brief details, as soon as possible as numbers are limited, to: The Education Officer, British Gas Headquarters Training Department, 59 Bryanston Street, London W1A 2AZ.

British Gas an equal opportunities employer

General Vacancies

SUBTITLER CEEFAX West London

£9,744 - £12,320
plus allowance of £569 p.a.

BBCtv

We are an equal opportunities employer

The BBC's teletext service, CEEFAX, provides subtitles for the hearing-impaired on a wide range of programmes.

Sub-titling involves sub-editing the soundtrack of television programmes into concise, easily-read subtitles while retaining the full sense and flavour of the programme. Using a video cassette and script, sub-titlers write their sub-titles into a computer terminal and have editorial responsibility for their own work.

Applicants should be graduates or equivalent with a sympathetic understanding of the communication difficulties of the hearing-impaired with the ability to condense material accurately, to work to deadlines, in some isolation, and to operate an electronic keyboard.

Contact us immediately for application form (quote ref. 7110/TE and enclose a.s.a.).
BBC Applications, London W1A 1AA.
Tel: 01-927 5799.

Completed application forms must be returned by Tuesday 18th February.

Lecturer in French Lecturer in German

Applications are invited for the posts of Lecturer Grade I in French and Lecturer Grade I in German in the Diplomatic Service Language Centre of the Foreign and Commonwealth Office, London SW1.

The successful candidates must be British citizens (or be in the process of applying for British Citizenship) and hold an honours degree in the languages, preferably possess post-graduate teaching qualifications and have at least five years' tertiary or late secondary teaching with some experience in teaching adults.

The main duties of the posts will be to teach French or German in small groups and individually, to Diplomatic Service officers in all grades, also to select and prepare print and audio materials and to assist in course and syllabus planning.

Salary: The salary is based on the Burnham Lecturer Grade I scale (banded) £3,071 pa-£10,797 pa. In addition the post carries a longer working year allowance ranging from £1,032 pa-£1,836 pa and a London Area Allowance of £898 pa.

Conditions of service are those of an established Home Civil Servant including obligatory participation in the non-contributory Principal Civil Service Pension Scheme. There may be an opportunity in the future for promotion to Grade II.

Application forms and further details may be obtained from: Recruitment Section, Personnel Policy Department, Foreign and Commonwealth Office, Room 315, 3 Matthew Parker Street, London SW1H 9NL. (tel. 01-233 5241).

Completed applications should be received by 28 February 1986. The Civil Service is an Equal Opportunities Employer.

Foreign and Commonwealth Office

PLEASE MENTION THE T.H.E.S. when replying to advertisements

Colleges of Further Education

Inner London Education Authority Paddington College 26 Paddington Green London W2 Tel: 01-723 8626

PRINCIPAL LECTURER IN PHYSICAL SCIENCE

The successful candidate will be expected to lead one of two areas of the Department of Physical Science: Laboratory Technology and Measurement; or to lead the department in the development of the department's research and development work.

The person appointed will be required to register for the MPhil which will then be awarded to him.

Salary: £23,244 - £27,122 per annum
Closing date for applications 20 February 1986

Application forms and further particulars from the Personnel Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland, YO2 9BA. Telephone: (0421) 218121 ext 4114.

This post is suitable for a career appointment. It is considered of substantial value to the institution.

Inner London Education Authority
PARTTIME TUTOR
IN ACCOUNTANCY
AND ALLIED
SUBJECTS
AT SOUTH WEST
LONDON COLLEGE

Required as soon as possible. The successful candidate will be expected to teach in a variety of subjects in the evening. The successful candidate will be expected to have a minimum of 5 years' experience in the subject.

Subject: Accounting, Business Studies, Economics, Law, Mathematics, Physics, Chemistry, Biology, Health Studies, etc.

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Research and Studentships

TEESSIDE POLYTECHNIC Department of Computer Science LEA RESEARCH ASSISTANT - Distributed Systems

Applications are invited from suitably qualified candidates for a research assistant post of three years duration that has been allocated to the Computer Science Department. Candidates should have a 1st or 2nd class Honours Degree (or MSc) in Computer Science, Computing/Electronics or a related area.

A strong interest in operation systems and/or work with a highly skilled computer language is essential. The successful candidate will be involved in studying various aspects of distributed systems using the Concurrent Language OOLAM.

The person appointed will be required to register for the MPhil which will then be awarded to him.

Salary: £23,244 - £27,122 per annum
Closing date for applications 20 February 1986

Application forms and further particulars from the Personnel Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland, YO2 9BA. Telephone: (0421) 218121 ext 4114.

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University of Bradford MECHANICAL ENGINEERING RESEARCH ASSISTANT Computer Control in Polymer Engineering

Applications are invited from suitably qualified graduates with good honours in Mechanical Engineering to work with a highly skilled computer language in the project to develop a computer control system for a polymer extrusion process. The successful candidate will be involved in studying various aspects of polymer extrusion using the Concurrent Language OOLAM.

The person appointed will be required to register for the MPhil which will then be awarded to him.

Salary: £23,244 - £27,122 per annum
Closing date for applications 20 February 1986

Application forms and further particulars from the Personnel Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland, YO2 9BA. Telephone: (0421) 218121 ext 4114.

This post is suitable for a career appointment. It is considered of substantial value to the institution.

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University of Sussex RESEARCH FELLOW IN COMPUTER SCIENCE

A Research Fellow is required for a 3-year period to develop a research project in the field of computer science. The successful candidate will be expected to have a minimum of 5 years' experience in the subject.

Applicants should be graduates or equivalent with a minimum of 5 years' experience in the subject. The successful candidate will be expected to have a minimum of 5 years' experience in the subject.

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Overseas

INTERNATIONAL HOSPITALS